

Supplemental Table 3: Gene transcripts differentially expressed in overweight and obese patients in the medial compartment

Gene symbol	Gene name	Fold change	P value*	Description	Expression intensity			
					Obese (Mean)	Obese (SD)	Overweight (Mean)	Overweight (SD)
IGHV3-13	immunoglobulin heavy variable 3-13	1.90	0.014	Obese up vs Overweight	3.26	0.47	2.49	0.46
MIR3689D1	microRNA 3689d-1	1.85	0.047	Obese up vs Overweight	8.31	0.58	7.67	0.56
LINC01108	long intergenic non-protein coding RNA 1108	1.85	0.005	Obese up vs Overweight	3.62	0.46	3.08	0.25
IGLV2-33	immunoglobulin lambda variable 2-33 (non-functional)	1.85	0.022	Obese up vs Overweight	2.75	0.50	1.87	0.27
MIR4436A	microRNA 4436a	1.84	0.032	Obese up vs Overweight	3.40	0.56	2.71	0.14
PRR23C	proline rich 23C	1.80	0.001	Obese up vs Overweight	3.30	0.32	2.70	0.31
HS3ST6	heparan sulfate (glucosamine) 3-O-sulfotransferase 6	1.80	0.000	Obese up vs Overweight	3.61	0.28	2.88	0.14
MIR338	microRNA 338	1.79	0.021	Obese up vs Overweight	6.39	0.48	5.63	0.15
PON3	paraoxonase 3	1.79	0.049	Obese up vs Overweight	4.45	0.61	4.02	0.25
IGHV1-24	immunoglobulin heavy variable 1-24	1.78	0.028	Obese up vs Overweight	3.79	0.50	3.18	0.29
CBLC	Cbl proto-oncogene C, E3 ubiquitin protein ligase	1.77	0.006	Obese up vs Overweight	3.51	0.36	2.86	0.52
MIR152	microRNA 152	1.77	0.033	Obese up vs Overweight	5.80	0.52	5.21	0.31
MIR3142	microRNA 3142	1.76	0.009	Obese up vs Overweight	2.87	0.42	2.29	0.25
MIR659	microRNA 659	1.75	0.046	Obese up vs Overweight	4.52	0.53	3.88	0.42
NEAT1	nuclear paraspeckle assembly transcript 1 (non-protein coding)	1.74	0.005	Obese up vs Overweight	5.96	0.41	5.40	0.27
IGLJ4	immunoglobulin lambda joining 4 (non-functional)	1.74	0.008	Obese up vs Overweight	5.73	0.37	5.15	0.57
OR4X2	olfactory receptor, family 4, subfamily X, member 2 (gene)	1.74	0.024	Obese up vs Overweight	3.87	0.47	3.42	0.62
MIR3910-2	microRNA 3910-2	1.73	0.002	Obese up vs Overweight	2.80	0.45	2.50	0.08
SPAG1	sperm associated antigen 1	1.72	0.020	Obese up vs Overweight	5.31	0.44	4.77	0.49
ANTXR1	anthrax toxin receptor-like	1.70	0.006	Obese up vs Overweight	4.49	0.37	3.96	0.35
KRT31	keratin 31, type I	1.69	0.007	Obese up vs Overweight	4.53	0.30	3.90	0.67
RNF219-AS1	RNF219 antisense RNA 1	1.68	0.030	Obese up vs Overweight	2.78	0.54	2.46	0.09
AVP	arginine vasopressin	1.68	0.008	Obese up vs Overweight	4.14	0.36	3.55	0.42
MIG7	mig-7	1.67	0.005	Obese up vs Overweight	4.75	0.31	4.17	0.47
OR2T4	olfactory receptor, family 2, subfamily T, member 4	1.67	0.050	Obese up vs Overweight	5.10	0.53	4.66	0.13
HRAT17	heart tissue-associated transcript 17	1.67	0.012	Obese up vs Overweight	4.00	0.38	3.43	0.45
MIR518D	microRNA 518d	1.67	0.018	Obese up vs Overweight	2.48	0.43	1.98	0.11
TIPARP-AS1	TIPARP antisense RNA 1	1.67	0.041	Obese up vs Overweight	4.45	0.49	3.88	0.11
OOSP2	oocyte secreted protein 2	1.67	0.020	Obese up vs Overweight	2.95	0.41	2.45	0.48
GPR50	G protein-coupled receptor 50	1.66	0.009	Obese up vs Overweight	4.94	0.36	4.36	0.30
MIR301B	microRNA 301b	1.66	0.035	Obese up vs Overweight	3.79	0.46	3.31	0.49
TRIM55	tripartite motif containing 55	1.66	0.006	Obese up vs Overweight	3.67	0.34	3.07	0.20
LINC01582	long intergenic non-protein coding RNA 1582	1.66	0.014	Obese up vs Overweight	4.31	0.38	3.74	0.35
KRTAP20-3	keratin associated protein 20-3	1.66	0.023	Obese up vs Overweight	4.30	0.46	3.95	0.44
CTD-2154B17.1	uncharacterized CTD-2154B17.1	1.66	0.001	Obese up vs Overweight	2.83	0.33	2.41	0.15
PRAP1	proline-rich acidic protein 1	1.65	0.005	Obese up vs Overweight	6.90	0.31	6.37	0.44
CADM2	cell adhesion molecule 2	1.65	0.011	Obese up vs Overweight	4.01	0.41	3.58	0.11
MIR3188	microRNA 3188	1.65	0.023	Obese up vs Overweight	3.89	0.41	3.39	0.44

LINC01384	long intergenic non-protein coding RNA 1384	1.65	0.014	Obese up vs Overweight	4.15	0.42	3.74	0.28
FOXN4	forkhead box N4	1.65	0.001	Obese up vs Overweight	5.23	0.26	4.69	0.50
MIR4478	microRNA 4478	1.64	0.026	Obese up vs Overweight	4.05	0.37	3.45	0.73
FAM71E1	family with sequence similarity 71, member E1	1.64	0.008	Obese up vs Overweight	4.94	0.39	4.52	0.11
LINC01381	long intergenic non-protein coding RNA 1381	1.64	0.003	Obese up vs Overweight	3.61	0.30	2.98	0.30
TMEM171	transmembrane protein 171	1.63	0.005	Obese up vs Overweight	4.52	0.32	3.92	0.10
THEGL	theg spermatid protein-like	1.63	0.007	Obese up vs Overweight	4.39	0.37	3.96	0.19
MC5R	melanocortin 5 receptor	1.63	0.000	Obese up vs Overweight	3.98	0.27	3.54	0.31
SLC22A25	solute carrier family 22, member 25	1.63	0.016	Obese up vs Overweight	3.94	0.39	3.39	0.08
STEAP1B	STEAP family member 1B	1.63	0.027	Obese up vs Overweight	4.36	0.38	3.67	0.49
UPK2	uroplakin 2	1.62	0.002	Obese up vs Overweight	5.06	0.34	4.67	0.33
MIR182	microRNA 182	1.62	0.019	Obese up vs Overweight	3.67	0.38	3.17	0.42
LINC01167	long intergenic non-protein coding RNA 1167	1.62	0.009	Obese up vs Overweight	5.28	0.36	4.72	0.23
SOX15	SRY box 15	1.61	0.005	Obese up vs Overweight	5.32	0.40	5.02	0.18
LINC00355	long intergenic non-protein coding RNA 355	1.61	0.014	Obese up vs Overweight	3.86	0.36	3.32	0.23
CHST5	carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 5	1.61	0.014	Obese up vs Overweight	4.96	0.39	4.42	0.12
NUPR2	nuclear protein 2, transcriptional regulator	1.61	0.029	Obese up vs Overweight	5.68	0.36	5.16	0.71
FABP6	fatty acid binding protein 6, ileal	1.61	0.018	Obese up vs Overweight	5.34	0.41	4.90	0.03
DNAJC27-AS1	DNAJC27 antisense RNA 1	1.60	0.018	Obese up vs Overweight	4.18	0.38	3.57	0.25
DKFZP434A062	uncharacterized LOC26102	1.60	0.001	Obese up vs Overweight	5.03	0.25	4.52	0.32
SLC14A2	solute carrier family 14 (urea transporter), member 2	1.60	0.009	Obese up vs Overweight	4.68	0.39	4.34	0.40
H2BFM	H2B histone family, member M	1.60	0.004	Obese up vs Overweight	3.79	0.31	3.29	0.07
RAMP1	receptor (G protein-coupled) activity modifying protein 1	1.60	0.010	Obese up vs Overweight	5.50	0.36	5.07	0.30
LINC01586	long intergenic non-protein coding RNA 1586	1.60	0.001	Obese up vs Overweight	4.50	0.25	4.07	0.48
TNKS2-AS1	TNKS2 antisense RNA 1 (head to head)	1.59	0.001	Obese up vs Overweight	5.38	0.28	4.93	0.28
SELV	selenoprotein V	1.59	0.016	Obese up vs Overweight	5.28	0.36	4.78	0.45
VSTM2B	V-set and transmembrane domain containing 2B	1.59	0.010	Obese up vs Overweight	4.51	0.36	4.08	0.15
CD72	CD72 molecule	1.59	0.003	Obese up vs Overweight	4.63	0.28	4.11	0.35
IGHD	immunoglobulin heavy constant delta	1.58	0.009	Obese up vs Overweight	4.75	0.33	4.36	0.56
SPRN	shadow of prion protein homolog (zebrafish)	1.58	0.026	Obese up vs Overweight	6.32	0.41	5.85	0.08
TCF24	transcription factor 24	1.58	0.008	Obese up vs Overweight	4.27	0.33	3.79	0.24
ZNF256	zinc finger protein 256	1.58	0.013	Obese up vs Overweight	5.52	0.42	5.17	0.23
AICDA	activation-induced cytidine deaminase	1.58	0.003	Obese up vs Overweight	3.87	0.27	3.33	0.22
BMP15	bone morphogenetic protein 15	1.58	0.012	Obese up vs Overweight	4.57	0.34	3.99	0.17
ADRB2	adrenoceptor beta 2, surface	1.58	0.023	Obese up vs Overweight	6.44	0.43	6.13	0.25
C1QTNF9	C1q and tumor necrosis factor related protein 9	1.58	0.015	Obese up vs Overweight	3.64	0.40	3.08	0.07
GFI1B	growth factor independent 1B transcription repressor	1.57	0.022	Obese up vs Overweight	4.92	0.37	4.40	0.30
FAM131B	family with sequence similarity 131, member B	1.57	0.029	Obese up vs Overweight	4.72	0.39	4.30	0.51
PCDHB12	protocadherin beta 12	1.57	0.011	Obese up vs Overweight	6.79	0.34	6.28	0.07
SLC35G4	solute carrier family 35, member G4	1.57	0.015	Obese up vs Overweight	4.69	0.32	4.30	0.69
LYPD6	LY6	1.57	0.000	Obese up vs Overweight	4.17	0.22	3.70	0.11
MAGEB18	MAGE family member B18	1.57	0.004	Obese up vs Overweight	4.44	0.29	4.04	0.41
MIR1208	microRNA 1208	1.56	0.019	Obese up vs Overweight	3.73	0.36	3.30	0.35
LINC01561	long intergenic non-protein coding RNA 1561	1.56	0.021	Obese up vs Overweight	5.00	0.31	4.46	0.61

<i>KIF4B</i>	kinesin family member 4B	1.56	0.029	Obese up vs Overweight	6.70	0.40	6.29	0.23
<i>RBM1Y1J</i>	RNA binding motif protein, Y-linked, family 1, member J	1.56	0.004	Obese up vs Overweight	2.52	0.32	2.14	0.09
<i>MAGEB16</i>	MAGE family member B16	1.56	0.046	Obese up vs Overweight	5.30	0.42	4.83	0.38
<i>MIR3122</i>	microRNA 3122	1.56	0.039	Obese up vs Overweight	2.87	0.43	2.51	0.40
<i>MIR4692</i>	microRNA 4692	1.56	0.011	Obese up vs Overweight	6.69	0.35	6.24	0.13
<i>THAP7-AS1</i>	THAP7 antisense RNA 1	1.56	0.006	Obese up vs Overweight	5.16	0.31	4.75	0.28
<i>CHRNA7</i>	cholinergic receptor, nicotinic alpha 7	1.55	0.018	Obese up vs Overweight	4.58	0.34	4.02	0.36
<i>MIR2278</i>	microRNA 2278	1.55	0.001	Obese up vs Overweight	5.02	0.34	4.81	0.43
<i>FLJ36000</i>	uncharacterized FLJ36000	1.55	0.028	Obese up vs Overweight	5.17	0.37	4.78	0.63
<i>ACTN1-AS1</i>	ACTN1 antisense RNA 1	1.55	0.016	Obese up vs Overweight	4.41	0.37	3.98	0.20
<i>PCSK2</i>	proprotein convertase subtilisin	1.55	0.003	Obese up vs Overweight	5.20	0.28	4.73	0.11
<i>MIR622</i>	microRNA 622	1.55	0.026	Obese up vs Overweight	4.52	0.36	3.86	0.20
<i>RGS9BP</i>	regulator of G protein signaling 9 binding protein	1.55	0.012	Obese up vs Overweight	4.34	0.35	4.03	0.51
<i>KRTAP13-1</i>	keratin associated protein 13-1	1.55	0.007	Obese up vs Overweight	4.21	0.31	3.77	0.21
<i>IGFL4</i>	IGF like family member 4	1.55	0.035	Obese up vs Overweight	3.06	0.39	2.56	0.19
<i>ABRA</i>	actin binding Rho activating protein	1.54	0.003	Obese up vs Overweight	4.87	0.27	4.37	0.10
<i>LRRC3C</i>	leucine rich repeat containing 3C	1.54	0.028	Obese up vs Overweight	5.00	0.42	4.73	0.41
<i>AGXT</i>	alanine-glyoxylate aminotransferase	1.54	0.002	Obese up vs Overweight	4.94	0.25	4.45	0.23
<i>LINC01558</i>	long intergenic non-protein coding RNA 1558	1.54	0.015	Obese up vs Overweight	4.36	0.40	4.09	0.25
<i>GPR27</i>	G protein-coupled receptor 27	1.54	0.034	Obese up vs Overweight	5.57	0.43	5.23	0.24
<i>INSM1</i>	insulinoma-associated 1	1.54	0.007	Obese up vs Overweight	5.48	0.24	4.95	0.53
<i>PP12613</i>	uncharacterized LOC100192379	1.54	0.028	Obese up vs Overweight	3.84	0.39	3.42	0.09
<i>LINC01114</i>	long intergenic non-protein coding RNA 1114	1.54	0.031	Obese up vs Overweight	3.87	0.41	3.50	0.23
<i>FRMD5</i>	FERM domain containing 5	1.54	0.010	Obese up vs Overweight	4.13	0.30	3.54	0.27
<i>HTR1D</i>	5-hydroxytryptamine (serotonin) receptor 1D, G protein-coupled	1.54	0.011	Obese up vs Overweight	3.81	0.33	3.36	0.24
<i>PLCG2</i>	phospholipase C, gamma 2 (phosphatidylinositol-specific)	1.54	0.011	Obese up vs Overweight	4.28	0.37	3.97	0.23
<i>CABP7</i>	calcium binding protein 7	1.54	0.019	Obese up vs Overweight	4.68	0.35	4.15	0.19
<i>LINC01043</i>	long intergenic non-protein coding RNA 1043	1.53	0.007	Obese up vs Overweight	4.16	0.30	3.74	0.26
<i>KIF21B</i>	kinesin family member 21B	1.53	0.010	Obese up vs Overweight	4.75	0.36	4.44	0.18
<i>KT112</i>	KT112 chromatin associated homolog	1.53	0.003	Obese up vs Overweight	5.58	0.27	5.16	0.30
<i>GSTO2</i>	glutathione S-transferase omega 2	1.53	0.046	Obese up vs Overweight	5.58	0.45	5.31	0.29
<i>LHX3</i>	LIM homeobox 3	1.53	0.033	Obese up vs Overweight	5.57	0.36	4.96	0.31
<i>ZGLP1</i>	zinc finger, GATA-like protein 1	1.53	0.002	Obese up vs Overweight	5.17	0.26	4.60	0.09
<i>GALNT9</i>	polypeptide N-acetylgalactosaminyltransferase 9	1.53	0.006	Obese up vs Overweight	5.07	0.30	4.68	0.26
<i>ZNF17</i>	zinc finger protein 17	1.53	0.029	Obese up vs Overweight	4.91	0.37	4.46	0.35
<i>LYPD4</i>	LY6	1.53	0.019	Obese up vs Overweight	4.56	0.35	4.12	0.19
<i>MIR4706</i>	microRNA 4706	1.53	0.013	Obese up vs Overweight	3.97	0.34	3.35	0.02
<i>DMBX1</i>	diencephalon	1.53	0.012	Obese up vs Overweight	5.13	0.33	4.69	0.16
<i>MZT2A</i>	mitotic spindle organizing protein 2A	1.53	0.005	Obese up vs Overweight	3.96	0.31	3.59	0.26
<i>LINC00331</i>	long intergenic non-protein coding RNA 331	1.53	0.004	Obese up vs Overweight	3.77	0.28	3.31	0.23
<i>CECR3</i>	cat eye syndrome chromosome region, candidate 3 (non-protein coding)	1.53	0.023	Obese up vs Overweight	4.28	0.33	3.70	0.33

<i>KCNA7</i>	potassium channel, voltage gated shaker related subfamily A, member 7	1.53	0.018	Obese up vs Overweight	3.84	0.37	3.49	0.32
<i>LINC00210</i>	long intergenic non-protein coding RNA 210	1.53	0.027	Obese up vs Overweight	4.68	0.36	4.22	0.33
<i>OR52A5</i>	olfactory receptor, family 52, subfamily A, member 5	1.52	0.031	Obese up vs Overweight	3.71	0.32	3.21	0.59
<i>OR10A7</i>	olfactory receptor, family 10, subfamily A, member 7	1.52	0.018	Obese up vs Overweight	4.08	0.34	3.54	0.07
<i>LINC00588</i>	long intergenic non-protein coding RNA 588	1.52	0.033	Obese up vs Overweight	2.76	0.40	2.40	0.27
<i>TBL1Y</i>	transducin (beta)-like 1, Y-linked	1.52	0.029	Obese up vs Overweight	2.75	0.38	2.36	0.35
<i>GSC2</i>	goosecoid homeobox 2	1.52	0.021	Obese up vs Overweight	3.89	0.37	3.50	0.04
<i>DGCR6L</i>	DiGeorge syndrome critical region gene 6-like	1.52	0.031	Obese up vs Overweight	6.37	0.34	5.85	0.44
<i>EPB41L1</i>	erythrocyte membrane protein band 4.1-like 1	1.52	0.018	Obese up vs Overweight	4.47	0.31	4.01	0.45
<i>CSH1</i>	chorionic somatomammotropin hormone 1 (placental lactogen)	1.52	0.024	Obese up vs Overweight	4.76	0.34	4.30	0.46
<i>CEBPB</i>	CCAAT	1.52	0.012	Obese up vs Overweight	5.63	0.39	5.38	0.17
<i>MAG</i>	myelin associated glycoprotein	1.52	0.025	Obese up vs Overweight	4.12	0.38	3.79	0.31
<i>PCDH11X</i>	protocadherin 11 X-linked	1.52	0.029	Obese up vs Overweight	2.35	0.38	2.02	0.43
<i>PIK3R6</i>	phosphoinositide-3-kinase, regulatory subunit 6	1.52	0.002	Obese up vs Overweight	4.40	0.23	3.96	0.37
<i>TTL6</i>	tubulin tyrosine ligase-like family member 6	1.51	0.023	Obese up vs Overweight	3.88	0.35	3.46	0.33
<i>KLHL25</i>	kelch-like family member 25	1.51	0.022	Obese up vs Overweight	4.26	0.37	3.94	0.30
<i>LINC00567</i>	long intergenic non-protein coding RNA 567	1.51	0.036	Obese up vs Overweight	4.14	0.36	3.44	0.41
<i>MIR3937</i>	microRNA 3937	1.51	0.027	Obese up vs Overweight	4.26	0.38	4.06	0.68
<i>SPATA31D4</i>	SPATA31 subfamily D, member 4	1.51	0.017	Obese up vs Overweight	4.56	0.35	4.03	0.57
<i>ST7-AS1</i>	ST7 antisense RNA 1	1.51	0.011	Obese up vs Overweight	5.62	0.33	5.27	0.27
<i>PCDHB5</i>	protocadherin beta 5	1.51	0.049	Obese up vs Overweight	5.89	0.42	5.58	0.40
<i>IQCF1</i>	IQ motif containing F1	1.51	0.048	Obese up vs Overweight	3.92	0.42	3.59	0.28
<i>DDX12P</i>	DEAD	1.51	0.004	Obese up vs Overweight	5.88	0.26	5.32	0.15
<i>DUOXA2</i>	dual oxidase maturation factor 2	1.51	0.025	Obese up vs Overweight	3.52	0.35	3.18	0.52
<i>TBX5-AS1</i>	TBX5 antisense RNA 1	1.51	0.039	Obese up vs Overweight	4.14	0.42	3.90	0.44
<i>PLA2G2F</i>	phospholipase A2, group IIF	1.51	0.011	Obese up vs Overweight	4.42	0.28	3.91	0.28
<i>SMAD5-AS1</i>	SMAD5 antisense RNA 1	1.51	0.030	Obese up vs Overweight	4.91	0.36	4.40	0.23
<i>STPG2</i>	sperm-tail PG-rich repeat containing 2	1.51	0.012	Obese up vs Overweight	3.96	0.32	3.53	0.08
<i>OR52N2</i>	olfactory receptor, family 52, subfamily N, member 2	1.50	0.020	Obese up vs Overweight	4.83	0.36	4.43	0.16
<i>TBKBP1</i>	TBK1 binding protein 1	1.50	0.039	Obese up vs Overweight	5.61	0.38	5.17	0.24
<i>KRTAP19-6</i>	keratin associated protein 19-6	1.50	0.017	Obese up vs Overweight	2.54	0.33	2.13	0.29
<i>LINC01624</i>	long intergenic non-protein coding RNA 1624	1.50	0.012	Obese up vs Overweight	3.80	0.30	3.35	0.29
<i>PRDM13</i>	PR domain containing 13	1.50	0.031	Obese up vs Overweight	4.37	0.36	3.97	0.40
<i>MIR378D2</i>	microRNA 378d-2	1.50	0.042	Obese up vs Overweight	4.00	0.42	3.72	0.27
<i>INSL5</i>	insulin-like 5	1.50	0.030	Obese up vs Overweight	4.04	0.37	3.71	0.43
<i>NIPA1</i>	non imprinted in Prader-Willi	1.50	0.023	Obese up vs Overweight	5.25	0.40	5.00	0.18
<i>EPHA5-AS1</i>	EPHA5 antisense RNA 1	1.50	0.019	Obese up vs Overweight	5.14	0.32	4.70	0.31
<i>CTD-3080P12.3</i>	uncharacterized LOC101928857	1.50	0.016	Obese up vs Overweight	4.83	0.30	4.42	0.45
<i>KRT7</i>	keratin 7, type II	1.50	0.017	Obese up vs Overweight	4.04	0.33	3.57	0.29
<i>SNORD116-12</i>	small nucleolar RNA, C	1.50	0.034	Obese up vs Overweight	2.56	0.45	2.32	0.18
<i>MCEMP1</i>	mast cell-expressed membrane protein 1	1.50	0.021	Obese up vs Overweight	4.18	0.32	3.70	0.33
<i>IGSF5</i>	immunoglobulin superfamily, member 5	1.50	0.027	Obese up vs Overweight	4.38	0.38	4.12	0.38
<i>CA5A</i>	carbonic anhydrase VA, mitochondrial	1.50	0.024	Obese up vs Overweight	3.91	0.33	3.53	0.42

<i>ZDHHC11</i>	zinc finger, DHHC-type containing 11	1.50	0.004	Obese up vs Overweight	5.41	0.25	4.93	0.26
<i>BPY2B</i>	basic charge, Y-linked, 2B	1.50	0.014	Obese up vs Overweight	3.39	0.33	3.02	0.14
<i>RNF225</i>	ring finger protein 225	1.49	0.048	Obese up vs Overweight	6.12	0.37	5.66	0.46
<i>FAM153A</i>	family with sequence similarity 153, member A	1.49	0.014	Obese up vs Overweight	3.16	0.29	2.80	0.49
<i>BOD1L2</i>	biorientation of chromosomes in cell division 1-like 2	1.49	0.005	Obese up vs Overweight	4.74	0.24	4.28	0.35
<i>DUSP4</i>	dual specificity phosphatase 4	1.49	0.014	Obese up vs Overweight	4.42	0.29	3.92	0.36
<i>SLC22A9</i>	solute carrier family 22 (organic anion transporter), member 9	1.49	0.023	Obese up vs Overweight	5.16	0.33	4.68	0.19
<i>FAM205A</i>	family with sequence similarity 205, member A	1.49	0.011	Obese up vs Overweight	4.47	0.27	3.94	0.32
<i>BPIFA1</i>	BPI fold containing family A, member 1	1.49	0.011	Obese up vs Overweight	4.43	0.30	3.98	0.02
<i>WDR88</i>	WD repeat domain 88	1.49	0.010	Obese up vs Overweight	4.61	0.34	4.34	0.21
<i>PDE6A</i>	phosphodiesterase 6A, cGMP-specific, rod, alpha	1.49	0.008	Obese up vs Overweight	4.02	0.30	3.63	0.16
<i>MIR1246</i>	microRNA 1246	1.49	0.013	Obese up vs Overweight	4.66	0.31	4.25	0.42
<i>APOL5</i>	apolipoprotein L, 5	1.49	0.011	Obese up vs Overweight	2.90	0.32	2.56	0.33
<i>ZBP1</i>	Z-DNA binding protein 1	1.49	0.006	Obese up vs Overweight	4.49	0.29	4.11	0.12
<i>GPR62</i>	G protein-coupled receptor 62	1.49	0.005	Obese up vs Overweight	4.87	0.25	4.41	0.21
<i>TRBV5-7</i>	T cell receptor beta variable 5-7 (non-functional)	1.48	0.030	Obese up vs Overweight	5.35	0.36	4.96	0.18
<i>GOLGA6L6</i>	golgin A6 family-like 6	1.48	0.026	Obese up vs Overweight	5.66	0.33	5.18	0.17
<i>MIR3664</i>	microRNA 3664	1.48	0.018	Obese up vs Overweight	2.79	0.33	2.36	0.15
<i>SH3BGR</i>	SH3 domain binding glutamate-rich protein	1.48	0.038	Obese up vs Overweight	5.94	0.37	5.55	0.17
<i>LINC01615</i>	long intergenic non-protein coding RNA 1615	1.48	0.012	Obese up vs Overweight	3.79	0.32	3.44	0.20
<i>A4GNT</i>	alpha-1,4-N-acetylglucosaminyltransferase	1.48	0.016	Obese up vs Overweight	3.28	0.32	2.80	0.29
<i>PRB1</i>	proline-rich protein BstNI subfamily 1	1.48	0.009	Obese up vs Overweight	6.19	0.24	5.69	0.41
<i>TRAJ43</i>	T cell receptor alpha joining 43	1.48	0.020	Obese up vs Overweight	5.27	0.32	4.90	0.24
<i>TOX3</i>	TOX high mobility group box family member 3	1.48	0.006	Obese up vs Overweight	4.84	0.31	4.52	0.09
<i>CD79B</i>	CD79b molecule, immunoglobulin-associated beta	1.48	0.033	Obese up vs Overweight	5.85	0.36	5.46	0.19
<i>LINC00578</i>	long intergenic non-protein coding RNA 578	1.47	0.039	Obese up vs Overweight	3.28	0.36	2.92	0.39
<i>GPR132</i>	G protein-coupled receptor 132	1.47	0.002	Obese up vs Overweight	4.52	0.26	4.20	0.18
<i>OR2T2</i>	olfactory receptor, family 2, subfamily T, member 2	1.47	0.019	Obese up vs Overweight	1.87	0.37	1.62	0.05
<i>TRPM2</i>	transient receptor potential cation channel, subfamily M, member 2	1.47	0.005	Obese up vs Overweight	5.12	0.23	4.72	0.45
<i>LINC01098</i>	long intergenic non-protein coding RNA 1098	1.47	0.013	Obese up vs Overweight	3.06	0.29	2.63	0.28
<i>SNORD116-11</i>	small nucleolar RNA, C	1.47	0.038	Obese up vs Overweight	3.95	0.35	3.40	0.23
<i>TMC2</i>	transmembrane channel like 2	1.47	0.011	Obese up vs Overweight	5.19	0.31	4.87	0.30
<i>FBXL16</i>	F-box and leucine-rich repeat protein 16	1.47	0.010	Obese up vs Overweight	3.94	0.29	3.57	0.31
<i>PCDH11Y</i>	protocadherin 11 Y-linked	1.47	0.013	Obese up vs Overweight	2.97	0.31	2.69	0.44
<i>BCL7A</i>	B-cell CLL	1.47	0.030	Obese up vs Overweight	4.95	0.36	4.61	0.27
<i>PTPRT</i>	protein tyrosine phosphatase, receptor type, T	1.47	0.002	Obese up vs Overweight	4.47	0.22	4.06	0.38
<i>GZMM</i>	granzyme M	1.47	0.033	Obese up vs Overweight	5.63	0.33	5.30	0.51
<i>KRT4</i>	keratin 4, type II	1.47	0.028	Obese up vs Overweight	4.49	0.34	4.06	0.17
<i>IGHV7-81</i>	immunoglobulin heavy variable 7-81 (non-functional)	1.47	0.031	Obese up vs Overweight	3.69	0.36	3.41	0.39
<i>TRBV5-5</i>	T cell receptor beta variable 5-5	1.47	0.048	Obese up vs Overweight	5.68	0.37	5.21	0.01
<i>CALML6</i>	calmodulin-like 6	1.47	0.047	Obese up vs Overweight	5.54	0.36	5.08	0.24
<i>SOX14</i>	SRY box 14	1.46	0.015	Obese up vs Overweight	3.92	0.30	3.56	0.28
<i>FAM71E2</i>	family with sequence similarity 71, member E2	1.46	0.009	Obese up vs Overweight	5.41	0.26	5.02	0.41

<i>NPAS1</i>	neuronal PAS domain protein 1	1.46	0.016	Obese up vs Overweight	4.73	0.27	4.32	0.44
<i>FGF22</i>	fibroblast growth factor 22	1.46	0.023	Obese up vs Overweight	3.30	0.34	3.02	0.30
<i>ZNF783</i>	zinc finger family member 783	1.46	0.015	Obese up vs Overweight	4.98	0.28	4.51	0.31
<i>KRT80</i>	keratin 80, type II	1.46	0.014	Obese up vs Overweight	3.78	0.30	3.43	0.27
<i>UBTD1</i>	ubiquitin domain containing 1	1.46	0.033	Obese up vs Overweight	5.47	0.33	5.00	0.20
<i>ATHL1</i>	ATH1, acid trehalase-like 1 (yeast)	1.46	0.042	Obese up vs Overweight	5.21	0.37	4.85	0.17
<i>TGFB2-AS1</i>	TGFB2 antisense RNA 1 (head to head)	1.46	0.006	Obese up vs Overweight	3.77	0.31	3.50	0.14
<i>ALPK2</i>	alpha kinase 2	1.46	0.010	Obese up vs Overweight	3.45	0.26	3.03	0.34
<i>MGC12916</i>	uncharacterized protein MGC12916	1.46	0.022	Obese up vs Overweight	4.80	0.30	4.46	0.53
<i>MIR133B</i>	microRNA 133b	1.46	0.018	Obese up vs Overweight	4.86	0.36	4.63	0.21
<i>RGS22</i>	regulator of G-protein signaling 22	1.46	0.012	Obese up vs Overweight	4.76	0.33	4.45	0.04
<i>TEX28</i>	testis expressed 28	1.46	0.035	Obese up vs Overweight	4.75	0.33	4.28	0.27
<i>VWCE</i>	von Willebrand factor C and EGF domains	1.46	0.046	Obese up vs Overweight	5.45	0.40	5.21	0.35
<i>GPR12</i>	G protein-coupled receptor 12	1.46	0.006	Obese up vs Overweight	4.83	0.27	4.43	0.21
<i>LRRC59</i>	leucine rich repeat containing 59	1.46	0.019	Obese up vs Overweight	5.69	0.31	5.27	0.03
<i>LINC01163</i>	long intergenic non-protein coding RNA 1163	1.46	0.040	Obese up vs Overweight	3.96	0.39	3.68	0.09
<i>HOXC11</i>	homeobox C11	1.45	0.037	Obese up vs Overweight	4.95	0.34	4.47	0.19
<i>DRD4</i>	dopamine receptor D4	1.45	0.025	Obese up vs Overweight	4.43	0.36	4.25	0.50
<i>SAXO1</i>	stabilizer of axonemal microtubules 1	1.45	0.016	Obese up vs Overweight	4.87	0.28	4.45	0.31
<i>TAF6L</i>	TAF6-like RNA polymerase II, p300	1.45	0.004	Obese up vs Overweight	4.76	0.27	4.42	0.09
<i>LINC00163</i>	long intergenic non-protein coding RNA 163	1.45	0.026	Obese up vs Overweight	5.78	0.35	5.40	0.16
<i>RNF224</i>	ring finger protein 224	1.45	0.012	Obese up vs Overweight	6.16	0.23	5.69	0.45
<i>LINC01320</i>	long intergenic non-protein coding RNA 1320	1.45	0.044	Obese up vs Overweight	4.17	0.34	3.66	0.30
<i>KBTD11</i>	kelch repeat and BTB (POZ) domain containing 11	1.45	0.026	Obese up vs Overweight	5.31	0.32	4.94	0.21
<i>VWA5B1</i>	von Willebrand factor A domain containing 5B1	1.45	0.039	Obese up vs Overweight	4.67	0.32	4.35	0.59
<i>ZDHHC12</i>	zinc finger, DHHC-type containing 12	1.45	0.032	Obese up vs Overweight	6.13	0.33	5.75	0.29
<i>BASP1</i>	brain abundant, membrane attached signal protein 1	1.45	0.040	Obese up vs Overweight	3.54	0.38	3.08	0.27
<i>CGN</i>	cingulin	1.45	0.036	Obese up vs Overweight	4.24	0.35	3.87	0.05
<i>ARNT2</i>	aryl-hydrocarbon receptor nuclear translocator 2	1.45	0.020	Obese up vs Overweight	4.61	0.23	4.17	0.62
<i>CYP1A1</i>	cytochrome P450, family 1, subfamily A, polypeptide 1	1.45	0.014	Obese up vs Overweight	3.88	0.28	3.45	0.20
<i>FOXO3</i>	forkhead box D3	1.45	0.007	Obese up vs Overweight	3.56	0.26	3.22	0.32
<i>MAGIX</i>	MAGI family member, X-linked	1.45	0.041	Obese up vs Overweight	4.83	0.30	4.45	0.67
<i>GGT1</i>	gamma-glutamyltransferase 1	1.45	0.020	Obese up vs Overweight	5.84	0.31	5.55	0.42
<i>PLEKHA6</i>	pleckstrin homology domain containing, family A member 6	1.45	0.049	Obese up vs Overweight	6.04	0.36	5.68	0.35
<i>LRRC43</i>	leucine rich repeat containing 43	1.45	0.000	Obese up vs Overweight	4.03	0.17	3.65	0.09
<i>ARHGEF38-IT1</i>	ARHGEF38 intronic transcript 1	1.44	0.023	Obese up vs Overweight	3.88	0.31	3.61	0.48
<i>RPARP-AS1</i>	RPARP antisense RNA 1	1.44	0.046	Obese up vs Overweight	5.08	0.33	4.50	0.37
<i>OR4P4</i>	olfactory receptor, family 4, subfamily P, member 4	1.44	0.043	Obese up vs Overweight	3.86	0.37	3.55	0.31
<i>MIR493</i>	microRNA 493	1.44	0.018	Obese up vs Overweight	2.83	0.34	2.60	0.28
<i>CCDC140</i>	coiled-coil domain containing 140	1.44	0.042	Obese up vs Overweight	4.47	0.33	4.06	0.42
<i>SLC6A15</i>	solute carrier family 6 (neutral amino acid transporter), member 15	1.44	0.014	Obese up vs Overweight	3.73	0.30	3.41	0.16
<i>ATP2B3</i>	ATPase, Ca++ transporting, plasma membrane 3	1.44	0.045	Obese up vs Overweight	3.36	0.35	3.02	0.32
<i>LINC00942</i>	long intergenic non-protein coding RNA 942	1.44	0.008	Obese up vs Overweight	4.10	0.29	3.82	0.26

<i>UCN3</i>	urocortin 3	1.44	0.007	Obese up vs Overweight	4.09	0.26	3.71	0.28
<i>ZNF703</i>	zinc finger protein 703	1.44	0.042	Obese up vs Overweight	6.05	0.35	5.68	0.18
<i>GNGT2</i>	guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2	1.44	0.011	Obese up vs Overweight	4.83	0.25	4.43	0.37
<i>SHANK2-AS3</i>	SHANK2 antisense RNA 3	1.44	0.018	Obese up vs Overweight	4.94	0.28	4.44	0.20
<i>SMCO1</i>	single-pass membrane protein with coiled-coil domains 1	1.44	0.011	Obese up vs Overweight	4.64	0.27	4.29	0.33
<i>MIR132</i>	microRNA 132	1.44	0.010	Obese up vs Overweight	3.76	0.28	3.42	0.22
<i>FOXI2</i>	forkhead box I2	1.44	0.032	Obese up vs Overweight	4.62	0.33	4.30	0.33
<i>LINGO4</i>	leucine rich repeat and Ig domain containing 4	1.44	0.047	Obese up vs Overweight	5.09	0.35	4.79	0.47
<i>TRDV2</i>	T cell receptor delta variable 2	1.44	0.009	Obese up vs Overweight	2.87	0.28	2.57	0.32
<i>VHLL</i>	von Hippel-Lindau tumor suppressor-like	1.44	0.013	Obese up vs Overweight	4.06	0.30	3.78	0.35
<i>SLC15A1</i>	solute carrier family 15 (oligopeptide transporter), member 1	1.44	0.020	Obese up vs Overweight	3.94	0.30	3.56	0.21
<i>ECHDC3</i>	enoyl-CoA hydratase domain containing 3	1.44	0.014	Obese up vs Overweight	4.67	0.28	4.31	0.27
<i>MPG</i>	N-methylpurine DNA glycosylase	1.44	0.017	Obese up vs Overweight	5.15	0.31	4.84	0.20
<i>HYPM</i>	huntingtin interacting protein M	1.44	0.005	Obese up vs Overweight	4.36	0.24	3.98	0.27
<i>SHANK2</i>	SH3 and multiple ankyrin repeat domains 2	1.43	0.045	Obese up vs Overweight	3.11	0.33	2.71	0.37
<i>CCR4</i>	chemokine (C-C motif) receptor 4	1.43	0.021	Obese up vs Overweight	3.41	0.27	3.05	0.43
<i>OR2S2</i>	olfactory receptor, family 2, subfamily S, member 2 (gene	1.43	0.033	Obese up vs Overweight	4.37	0.33	4.11	0.49
<i>ART5</i>	ADP-ribosyltransferase 5	1.43	0.004	Obese up vs Overweight	4.87	0.22	4.39	0.34
<i>MIR1272</i>	microRNA 1272	1.43	0.007	Obese up vs Overweight	2.90	0.28	2.62	0.22
<i>SUN2</i>	Sad1 and UNC84 domain containing 2	1.43	0.013	Obese up vs Overweight	5.91	0.27	5.50	0.14
<i>LINC00239</i>	long intergenic non-protein coding RNA 239	1.43	0.010	Obese up vs Overweight	4.33	0.24	3.89	0.28
<i>NXNL2</i>	nucleoredoxin-like 2	1.43	0.027	Obese up vs Overweight	5.22	0.35	4.99	0.30
<i>SLAMF9</i>	SLAM family member 9	1.43	0.028	Obese up vs Overweight	4.32	0.32	4.05	0.44
<i>PWRN2</i>	Prader-Willi region non-protein coding RNA 2	1.43	0.018	Obese up vs Overweight	3.77	0.28	3.39	0.24
<i>ZMYM2</i>	zinc finger, MYM-type 2	1.43	0.033	Obese up vs Overweight	3.99	0.38	3.80	0.08
<i>HRH3</i>	histamine receptor H3	1.43	0.026	Obese up vs Overweight	4.87	0.33	4.59	0.21
<i>NPAS4</i>	neuronal PAS domain protein 4	1.43	0.021	Obese up vs Overweight	3.88	0.30	3.56	0.33
<i>KRTAP20-2</i>	keratin associated protein 20-2	1.43	0.046	Obese up vs Overweight	5.12	0.35	4.79	0.22
<i>SLC35D3</i>	solute carrier family 35, member D3	1.43	0.003	Obese up vs Overweight	4.84	0.23	4.46	0.11
<i>SLC22A8</i>	solute carrier family 22 (organic anion transporter), member 8	1.43	0.012	Obese up vs Overweight	4.82	0.25	4.39	0.28
<i>MIR3135B</i>	microRNA 3135b	1.42	0.021	Obese up vs Overweight	6.26	0.31	5.92	0.09
<i>DHRS11</i>	dehydrogenase	1.42	0.003	Obese up vs Overweight	5.36	0.23	5.01	0.12
<i>LINC00315</i>	long intergenic non-protein coding RNA 315	1.42	0.030	Obese up vs Overweight	5.77	0.31	5.40	0.28
<i>CAPN14</i>	calpain 14	1.42	0.042	Obese up vs Overweight	3.02	0.33	2.62	0.14
<i>NT5M</i>	5,3-nucleotidase, mitochondrial	1.42	0.016	Obese up vs Overweight	3.97	0.30	3.66	0.16
<i>LBX1-AS1</i>	LBX1 antisense RNA 1 (head to head)	1.42	0.034	Obese up vs Overweight	4.25	0.32	3.96	0.38
<i>TEX15</i>	testis expressed 15	1.42	0.044	Obese up vs Overweight	3.51	0.39	3.32	0.14
<i>GPN3</i>	GPN-loop GTPase 3	1.42	0.040	Obese up vs Overweight	4.35	0.39	4.15	0.22
<i>TMEM88B</i>	transmembrane protein 88B	1.42	0.023	Obese up vs Overweight	6.76	0.29	6.32	0.06
<i>GREB1</i>	growth regulation by estrogen in breast cancer 1	1.42	0.006	Obese up vs Overweight	4.06	0.26	3.71	0.04
<i>DCT</i>	dopachrome tautomerase	1.42	0.036	Obese up vs Overweight	4.62	0.33	4.27	0.19
<i>SLC34A2</i>	solute carrier family 34 (type II sodium	1.42	0.002	Obese up vs Overweight	3.78	0.27	3.54	0.15

<i>HSF4</i>	heat shock transcription factor 4	1.42	0.044	Obese up vs Overweight	6.64	0.34	6.29	0.22
<i>ATP6V1E2</i>	ATPase, H+ transporting, lysosomal 31kDa, V1 subunit E2	1.42	0.001	Obese up vs Overweight	5.08	0.22	4.75	0.22
<i>SPATA41</i>	spermatogenesis associated 41 (non-protein coding)	1.42	0.043	Obese up vs Overweight	4.64	0.33	4.22	0.21
<i>ZNF474</i>	zinc finger protein 474	1.42	0.035	Obese up vs Overweight	3.69	0.34	3.39	0.19
<i>IGHV4-34</i>	immunoglobulin heavy variable 4-34	1.42	0.043	Obese up vs Overweight	6.75	0.31	6.31	0.34
<i>CACNA2D2</i>	calcium channel, voltage-dependent, alpha 2	1.42	0.019	Obese up vs Overweight	4.81	0.31	4.53	0.12
<i>GDF2</i>	growth differentiation factor 2	1.42	0.002	Obese up vs Overweight	4.25	0.23	3.95	0.25
<i>ANO9</i>	anoctamin 9	1.42	0.027	Obese up vs Overweight	4.88	0.30	4.47	0.14
<i>DLGAP1</i>	discs, large (Drosophila) homolog-associated protein 1	1.42	0.003	Obese up vs Overweight	5.03	0.25	4.62	0.28
<i>DSG3</i>	desmoglein 3	1.42	0.012	Obese up vs Overweight	3.66	0.27	3.28	0.19
<i>FLJ44385</i>	uncharacterized FLJ44385	1.42	0.016	Obese up vs Overweight	4.47	0.30	4.16	0.30
<i>PLG</i>	plasminogen	1.42	0.024	Obese up vs Overweight	4.10	0.32	3.82	0.22
<i>TMIGD2</i>	transmembrane and immunoglobulin domain containing 2	1.42	0.024	Obese up vs Overweight	3.46	0.30	3.21	0.47
<i>MIR3186</i>	microRNA 3186	1.42	0.034	Obese up vs Overweight	3.90	0.31	3.46	0.12
<i>FBXO6</i>	F-box protein 6	1.42	0.002	Obese up vs Overweight	4.95	0.23	4.59	0.13
<i>PAX2</i>	paired box 2	1.42	0.001	Obese up vs Overweight	4.94	0.18	4.49	0.18
<i>RAB11FIP5</i>	RAB11 family interacting protein 5 (class I)	1.42	0.030	Obese up vs Overweight	5.84	0.31	5.44	0.14
<i>BPIFB1</i>	BPI fold containing family B, member 1	1.42	0.017	Obese up vs Overweight	4.32	0.29	4.04	0.35
<i>MROH8</i>	maestro heat-like repeat family member 8	1.42	0.013	Obese up vs Overweight	5.63	0.26	5.23	0.20
<i>TRIML1</i>	tripartite motif family like 1	1.41	0.031	Obese up vs Overweight	3.78	0.27	3.32	0.43
<i>LINC01101</i>	long intergenic non-protein coding RNA 1101	1.41	0.007	Obese up vs Overweight	4.32	0.20	3.79	0.37
<i>LINC00116</i>	long intergenic non-protein coding RNA 116	1.41	0.029	Obese up vs Overweight	4.97	0.34	4.82	0.56
<i>FLYWCH1</i>	FLYWCH-type zinc finger 1	1.41	0.007	Obese up vs Overweight	6.05	0.24	5.61	0.25
<i>HAL</i>	histidine ammonia-lyase	1.41	0.033	Obese up vs Overweight	4.18	0.34	3.80	0.22
<i>POU4F1</i>	POU class 4 homeobox 1	1.41	0.026	Obese up vs Overweight	4.66	0.30	4.31	0.11
<i>CNTFR-AS1</i>	CNTFR antisense RNA 1	1.41	0.028	Obese up vs Overweight	5.32	0.28	4.93	0.35
<i>MPPED2</i>	metallophosphoesterase domain containing 2	1.41	0.028	Obese up vs Overweight	5.30	0.30	4.92	0.10
<i>MDGA2</i>	MAM domain containing glycosylphosphatidylinositol anchor 2	1.41	0.002	Obese up vs Overweight	3.56	0.21	3.17	0.12
<i>GLRA2</i>	glycine receptor alpha 2	1.41	0.038	Obese up vs Overweight	2.55	0.33	2.30	0.35
<i>ARMC12</i>	armadillo repeat containing 12	1.41	0.004	Obese up vs Overweight	4.65	0.28	4.43	0.06
<i>RPRML</i>	reprimin-like	1.41	0.019	Obese up vs Overweight	5.65	0.27	5.17	0.17
<i>MEI1</i>	meiotic double-stranded break formation protein 1	1.41	0.032	Obese up vs Overweight	4.68	0.31	4.43	0.45
<i>CCT6B</i>	chaperonin containing TCP1, subunit 6B (zeta 2)	1.41	0.030	Obese up vs Overweight	4.94	0.31	4.67	0.39
<i>OSM</i>	oncostatin M	1.41	0.024	Obese up vs Overweight	4.45	0.32	4.18	0.10
<i>TGM7</i>	transglutaminase 7	1.41	0.013	Obese up vs Overweight	4.55	0.26	4.16	0.18
<i>ANKRD24</i>	ankyrin repeat domain 24	1.41	0.030	Obese up vs Overweight	4.74	0.32	4.50	0.33
<i>PLA2G2C</i>	phospholipase A2, group IIC	1.41	0.026	Obese up vs Overweight	4.98	0.29	4.63	0.26
<i>UAP1L1</i>	UDP-N-acetylglucosamine pyrophosphorylase 1 like 1	1.40	0.008	Obese up vs Overweight	5.38	0.22	5.03	0.37
<i>WT1-AS</i>	WT1 antisense RNA	1.40	0.005	Obese up vs Overweight	4.21	0.24	3.87	0.06
<i>CACNG3</i>	calcium channel, voltage-dependent, gamma subunit 3	1.40	0.032	Obese up vs Overweight	5.48	0.27	5.13	0.48
<i>TRPV6</i>	transient receptor potential cation channel, subfamily V, member 6	1.40	0.033	Obese up vs Overweight	3.40	0.30	3.10	0.39
<i>MDH1B</i>	malate dehydrogenase 1B	1.40	0.049	Obese up vs Overweight	4.53	0.33	4.16	0.13

<i>MIR4650-1</i>	microRNA 4650-1	1.40	0.021	Obese up vs Overweight	3.43	0.28	3.03	0.18
<i>OR7D2</i>	olfactory receptor, family 7, subfamily D, member 2	1.40	0.023	Obese up vs Overweight	4.43	0.30	4.03	0.21
<i>USP6</i>	ubiquitin specific peptidase 6	1.40	0.034	Obese up vs Overweight	3.93	0.33	3.72	0.34
<i>KCP</i>	kielin	1.40	0.006	Obese up vs Overweight	5.66	0.21	5.24	0.26
<i>FAM179A</i>	family with sequence similarity 179, member A	1.40	0.010	Obese up vs Overweight	4.66	0.22	4.38	0.54
<i>MIR4492</i>	microRNA 4492	1.40	0.050	Obese up vs Overweight	5.60	0.34	5.28	0.09
<i>LINC00939</i>	long intergenic non-protein coding RNA 939	1.40	0.003	Obese up vs Overweight	4.38	0.24	4.13	0.27
<i>LINC01527</i>	long intergenic non-protein coding RNA 1527	1.40	0.010	Obese up vs Overweight	4.17	0.26	3.67	0.07
<i>WIZ-237311.2</i>	forkhead box L1-like	1.40	0.005	Obese up vs Overweight	4.19	0.25	3.69	0.07
<i>TPRN</i>	taperin	1.40	0.003	Obese up vs Overweight	4.94	0.20	4.59	0.33
<i>LINC01267</i>	long intergenic non-protein coding RNA 1267	1.40	0.049	Obese up vs Overweight	3.90	0.35	3.60	0.10
<i>E2F1</i>	E2F transcription factor 1	1.40	0.040	Obese up vs Overweight	5.40	0.31	5.01	0.19
<i>VPS9D1</i>	VPS9 domain containing 1	1.40	0.005	Obese up vs Overweight	4.92	0.23	4.55	0.15
<i>NCBP2-AS2</i>	NCBP2 antisense RNA 2 (head to head)	1.40	0.035	Obese up vs Overweight	5.87	0.30	5.61	0.45
<i>HOXC12</i>	homeobox C12	1.40	0.003	Obese up vs Overweight	4.87	0.24	4.57	0.19
<i>MIR4520-2</i>	microRNA 4520-2	1.40	0.045	Obese up vs Overweight	1.81	0.34	1.50	0.17
<i>GALR2</i>	galanin receptor 2	1.40	0.027	Obese up vs Overweight	4.97	0.32	4.71	0.17
<i>PRR30</i>	proline rich 30	1.40	0.031	Obese up vs Overweight	5.60	0.25	5.18	0.45
<i>GPLD1</i>	glycosylphosphatidylinositol specific phospholipase D1	1.40	0.034	Obese up vs Overweight	5.51	0.33	5.29	0.24
<i>LINC01399</i>	long intergenic non-protein coding RNA 1399	1.40	0.035	Obese up vs Overweight	4.60	0.29	4.22	0.40
<i>MIR4475</i>	microRNA 4475	1.40	0.038	Obese up vs Overweight	2.03	0.33	1.70	0.05
<i>MIR657</i>	microRNA 657	1.40	0.048	Obese up vs Overweight	6.05	0.32	5.64	0.20
<i>IL20RA</i>	interleukin 20 receptor, alpha	1.39	0.014	Obese up vs Overweight	3.94	0.28	3.67	0.25
<i>SBSN</i>	suprabasin	1.39	0.034	Obese up vs Overweight	5.14	0.34	4.95	0.24
<i>PNCK</i>	pregnancy up-regulated nonubiquitous CaM kinase	1.39	0.007	Obese up vs Overweight	4.18	0.22	3.72	0.19
<i>FLJ31356</i>	uncharacterized protein FLJ31356	1.39	0.017	Obese up vs Overweight	4.24	0.34	4.11	0.23
<i>PIAL4G</i>	peptidylprolyl isomerase A (cyclophilin A)-like 4G	1.39	0.038	Obese up vs Overweight	3.71	0.29	3.50	0.61
<i>PRKAG2-AS1</i>	PRKAG2 antisense RNA 1	1.39	0.037	Obese up vs Overweight	4.65	0.34	4.46	0.29
<i>RNF157-AS1</i>	RNF157 antisense RNA 1	1.39	0.033	Obese up vs Overweight	4.16	0.30	3.92	0.41
<i>KLHDC9</i>	kelch domain containing 9	1.39	0.002	Obese up vs Overweight	4.93	0.23	4.66	0.06
<i>KCNE5</i>	potassium channel, voltage gated subfamily E regulatory beta subunit 5	1.39	0.023	Obese up vs Overweight	5.16	0.29	4.88	0.29
<i>PRR19</i>	proline rich 19	1.39	0.039	Obese up vs Overweight	3.50	0.31	3.16	0.26
<i>SMPDL3B</i>	sphingomyelin phosphodiesterase, acid-like 3B	1.39	0.014	Obese up vs Overweight	4.44	0.24	4.10	0.35
<i>LINC00927</i>	long intergenic non-protein coding RNA 927	1.39	0.032	Obese up vs Overweight	4.07	0.30	3.78	0.26
<i>KLRG2</i>	killer cell lectin-like receptor subfamily G, member 2	1.39	0.015	Obese up vs Overweight	4.87	0.26	4.49	0.23
<i>FLT4</i>	fms-related tyrosine kinase 4	1.39	0.011	Obese up vs Overweight	4.54	0.24	4.16	0.14
<i>JPH2</i>	junctophilin 2	1.39	0.026	Obese up vs Overweight	4.80	0.26	4.41	0.34
<i>PRSS22</i>	protease, serine, 22	1.39	0.035	Obese up vs Overweight	5.61	0.30	5.30	0.31
<i>SCNN1A</i>	sodium channel, non voltage gated 1 alpha subunit	1.39	0.045	Obese up vs Overweight	5.15	0.34	4.90	0.06
<i>SLC35F3</i>	solute carrier family 35, member F3	1.39	0.031	Obese up vs Overweight	5.91	0.31	5.62	0.13
<i>MUC5AC</i>	mucin 5AC, oligomeric mucus	1.39	0.010	Obese up vs Overweight	5.09	0.23	4.67	0.17
<i>REEP1</i>	receptor accessory protein 1	1.39	0.022	Obese up vs Overweight	4.05	0.26	3.66	0.24
<i>CGB</i>	chorionic gonadotropin, beta polypeptide	1.39	0.021	Obese up vs Overweight	6.54	0.27	6.15	0.16

<i>LRIT1</i>	leucine-rich repeat, immunoglobulin-like and transmembrane domains 1	1.39	0.040	Obese up vs Overweight	4.40	0.28	3.94	0.32
<i>DNAAF1</i>	dynein, axonemal, assembly factor 1	1.39	0.004	Obese up vs Overweight	4.78	0.28	4.59	0.23
<i>FCAMR</i>	Fc receptor, IgA, IgM, high affinity	1.39	0.006	Obese up vs Overweight	4.97	0.20	4.64	0.40
<i>KIF1A</i>	kinesin family member 1A	1.39	0.024	Obese up vs Overweight	4.33	0.28	3.98	0.24
<i>ADAMTS19-AS1</i>	ADAMTS19 antisense RNA 1	1.39	0.017	Obese up vs Overweight	4.41	0.25	4.06	0.22
<i>PCAT6</i>	prostate cancer associated transcript 6 (non-protein coding)	1.39	0.027	Obese up vs Overweight	5.41	0.29	5.14	0.31
<i>SNX32</i>	sorting nexin 32	1.39	0.024	Obese up vs Overweight	4.87	0.25	4.53	0.44
<i>HS6ST2-AS1</i>	HS6ST2 antisense RNA 1	1.39	0.024	Obese up vs Overweight	4.61	0.28	4.30	0.21
<i>SLC6A13</i>	solute carrier family 6 (neurotransmitter transporter), member 13	1.39	0.010	Obese up vs Overweight	4.44	0.23	4.04	0.11
<i>GADD45G</i>	growth arrest and DNA-damage-inducible, gamma	1.39	0.027	Obese up vs Overweight	5.23	0.28	4.98	0.39
<i>NKAIN4</i>	Na+	1.38	0.036	Obese up vs Overweight	4.36	0.32	4.02	0.59
<i>OR10A4</i>	olfactory receptor, family 10, subfamily A, member 4	1.38	0.043	Obese up vs Overweight	4.68	0.29	4.45	0.57
<i>GPR150</i>	G protein-coupled receptor 150	1.38	0.029	Obese up vs Overweight	4.05	0.27	3.74	0.38
<i>RBPMS-AS1</i>	RBPMS antisense RNA 1	1.38	0.010	Obese up vs Overweight	4.50	0.22	3.97	0.36
<i>OR5D16</i>	olfactory receptor, family 5, subfamily D, member 16	1.38	0.049	Obese up vs Overweight	4.67	0.33	4.40	0.17
<i>TTY4</i>	testis-specific transcript, Y-linked 4 (non-protein coding)	1.38	0.049	Obese up vs Overweight	4.13	0.31	3.81	0.34
<i>PCBP1-AS1</i>	PCBP1 antisense RNA 1	1.38	0.032	Obese up vs Overweight	4.96	0.31	4.71	0.18
<i>MOV10L1</i>	Mov10 RISC complex RNA helicase like 1	1.38	0.036	Obese up vs Overweight	4.10	0.31	3.83	0.17
<i>GSG2</i>	germ cell associated 2 (haspin)	1.38	0.024	Obese up vs Overweight	4.09	0.28	3.71	0.05
<i>FAM167B</i>	family with sequence similarity 167, member B	1.38	0.031	Obese up vs Overweight	5.08	0.31	4.77	0.01
<i>KLK13</i>	kallikrein related peptidase 13	1.38	0.046	Obese up vs Overweight	4.35	0.32	4.09	0.37
<i>OVOL3</i>	ovo-like zinc finger 3	1.38	0.015	Obese up vs Overweight	5.93	0.26	5.67	0.37
<i>RGS7</i>	regulator of G-protein signaling 7	1.38	0.032	Obese up vs Overweight	2.96	0.33	2.76	0.27
<i>MUC19</i>	mucin 19, oligomeric	1.38	0.016	Obese up vs Overweight	2.98	0.25	2.66	0.29
<i>HEBP2</i>	heme binding protein 2	1.38	0.026	Obese up vs Overweight	6.90	0.31	6.62	0.02
<i>FXYD3</i>	FXYD domain containing ion transport regulator 3	1.38	0.017	Obese up vs Overweight	5.16	0.27	4.86	0.45
<i>PCBP3</i>	poly(rC) binding protein 3	1.38	0.015	Obese up vs Overweight	4.75	0.25	4.38	0.18
<i>ZNF560</i>	zinc finger protein 560	1.38	0.021	Obese up vs Overweight	3.79	0.26	3.36	0.14
<i>ZNF16</i>	zinc finger protein 16	1.38	0.046	Obese up vs Overweight	5.46	0.31	5.10	0.19
<i>PTH2</i>	parathyroid hormone 2	1.38	0.016	Obese up vs Overweight	4.79	0.20	4.46	0.51
<i>OR10P1</i>	olfactory receptor, family 10, subfamily P, member 1	1.38	0.019	Obese up vs Overweight	5.49	0.28	5.16	0.03
<i>SMCP</i>	sperm mitochondria-associated cysteine-rich protein	1.38	0.034	Obese up vs Overweight	3.65	0.28	3.21	0.10
<i>KCNE2</i>	potassium channel, voltage gated subfamily E regulatory beta subunit 2	1.38	0.033	Obese up vs Overweight	3.50	0.30	3.18	0.08
<i>SFRP5</i>	secreted frizzled-related protein 5	1.38	0.003	Obese up vs Overweight	4.89	0.20	4.51	0.07
<i>POM121L2</i>	POM121 transmembrane nucleoporin-like 2	1.38	0.023	Obese up vs Overweight	4.18	0.29	3.95	0.23
<i>DNAH17-AS1</i>	DNAH17 antisense RNA 1	1.38	0.048	Obese up vs Overweight	4.32	0.31	3.89	0.15
<i>CH507-9B2.8</i>	uncharacterized LOC105372831	1.38	0.035	Obese up vs Overweight	5.18	0.28	4.84	0.26
<i>KIR2DL1</i>	killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 1	1.38	0.018	Obese up vs Overweight	6.01	0.23	5.57	0.33
<i>ADH4</i>	alcohol dehydrogenase 4 (class II), pi polypeptide	1.38	0.016	Obese up vs Overweight	3.55	0.24	3.09	0.20
<i>MBLAC1</i>	metallo-beta-lactamase domain containing 1	1.38	0.023	Obese up vs Overweight	5.12	0.30	4.87	0.14

ANGPTL8	angiopoietin like 8	1.38	0.017	Obese up vs Overweight	5.28	0.25	4.92	0.21
TACC2	transforming, acidic coiled-coil containing protein 2	1.38	0.025	Obese up vs Overweight	5.75	0.28	5.46	0.25
TMEM246	transmembrane protein 246	1.38	0.014	Obese up vs Overweight	3.93	0.28	3.71	0.18
PRRT4	proline-rich transmembrane protein 4	1.38	0.040	Obese up vs Overweight	5.12	0.29	4.91	0.53
ACOT2	acyl-CoA thioesterase 2	1.38	0.041	Obese up vs Overweight	4.74	0.29	4.34	0.14
SYNPO2L	synaptopodin 2-like	1.37	0.042	Obese up vs Overweight	4.35	0.31	4.08	0.26
WDR7	WD repeat domain 7	1.37	0.038	Obese up vs Overweight	4.55	0.31	4.30	0.28
ZNF280B	zinc finger protein 280B	1.37	0.049	Obese up vs Overweight	5.15	0.31	4.85	0.35
SLC22A7	solute carrier family 22 (organic anion transporter), member 7	1.37	0.031	Obese up vs Overweight	4.41	0.28	4.03	0.16
GPR37	G protein-coupled receptor 37 (endothelin receptor type B-like)	1.37	0.012	Obese up vs Overweight	3.73	0.24	3.42	0.16
IL36A	interleukin 36, alpha	1.37	0.039	Obese up vs Overweight	4.77	0.27	4.31	0.29
MIR3167	microRNA 3167	1.37	0.017	Obese up vs Overweight	1.80	0.28	1.61	0.30
TMEM210	transmembrane protein 210	1.37	0.037	Obese up vs Overweight	4.82	0.28	4.42	0.17
KCNE1	potassium channel, voltage gated subfamily E regulatory beta subunit 1	1.37	0.013	Obese up vs Overweight	4.90	0.22	4.56	0.33
MIR646HG	MIR646 host gene	1.37	0.016	Obese up vs Overweight	4.77	0.24	4.37	0.14
WNT8A	wingless-type MMTV integration site family, member 8A	1.37	0.013	Obese up vs Overweight	5.39	0.27	5.14	0.12
MNX1	motor neuron and pancreas homeobox 1	1.37	0.028	Obese up vs Overweight	4.84	0.28	4.52	0.18
ATP5L2	ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit G2	1.37	0.017	Obese up vs Overweight	4.91	0.30	4.68	0.23
POU3F3	POU class 3 homeobox 3	1.37	0.047	Obese up vs Overweight	5.36	0.31	5.02	0.24
STARD6	StAR-related lipid transfer domain containing 6	1.37	0.021	Obese up vs Overweight	4.37	0.26	4.05	0.20
ONECUT2	one cut homeobox 2	1.37	0.016	Obese up vs Overweight	6.03	0.29	5.83	0.07
SCN7A	sodium channel, voltage gated, type VII alpha subunit	1.37	0.037	Obese up vs Overweight	3.91	0.35	3.48	0.16
HCRT	hypocretin (orexin) neuropeptide precursor	1.37	0.020	Obese up vs Overweight	4.74	0.27	4.48	0.32
PEX5L	peroxisomal biogenesis factor 5-like	1.37	0.033	Obese up vs Overweight	3.43	0.33	3.21	0.22
NMBR	neuromedin B receptor	1.37	0.033	Obese up vs Overweight	4.01	0.29	3.69	0.17
MRO	maestro	1.37	0.013	Obese up vs Overweight	4.25	0.24	3.84	0.07
CEACAM21	carcinoembryonic antigen-related cell adhesion molecule 21	1.37	0.001	Obese up vs Overweight	3.66	0.19	3.36	0.15
FAM221B	family with sequence similarity 221, member B	1.37	0.037	Obese up vs Overweight	4.59	0.29	4.09	0.15
TMEM207	transmembrane protein 207	1.37	0.039	Obese up vs Overweight	3.78	0.30	3.44	0.21
SGCZ	sarcoglycan zeta	1.37	0.020	Obese up vs Overweight	3.57	0.28	3.38	0.32
LRRTM3	leucine rich repeat transmembrane neuronal 3	1.37	0.018	Obese up vs Overweight	4.11	0.25	3.64	0.12
CNTNAP2	contactin associated protein-like 2	1.37	0.039	Obese up vs Overweight	4.02	0.30	3.72	0.28
TOMM40L	translocase of outer mitochondrial membrane 40 homolog (yeast)-like	1.37	0.036	Obese up vs Overweight	4.67	0.27	4.28	0.37
CIDEA	cell death-inducing DFFA-like effector a	1.37	0.024	Obese up vs Overweight	5.16	0.29	4.90	0.17
TOMM20L	translocase of outer mitochondrial membrane 20 homolog (yeast)-like	1.37	0.007	Obese up vs Overweight	4.18	0.27	4.04	0.34
LL22NC03-104C7.1	uncharacterized LOC105373004	1.37	0.021	Obese up vs Overweight	5.31	0.30	5.12	0.19
SMIM23	small integral membrane protein 23	1.37	0.041	Obese up vs Overweight	4.83	0.30	4.59	0.29
PRAMEF17	PRAME family member 17	1.37	0.027	Obese up vs Overweight	4.44	0.27	4.09	0.19

SCGB1D4	secretoglobin, family 1D, member 4	1.37	0.041	Obese up vs Overweight	3.41	0.37	3.33	0.16
PITPNA-AS1	PITPNA antisense RNA 1	1.37	0.005	Obese up vs Overweight	7.48	0.24	7.23	0.08
LINC01300	long intergenic non-protein coding RNA 1300	1.36	0.034	Obese up vs Overweight	3.53	0.28	3.14	0.14
MSI1	musashi RNA binding protein 1	1.36	0.012	Obese up vs Overweight	5.02	0.25	4.75	0.17
WNK2	WNK lysine deficient protein kinase 2	1.36	0.022	Obese up vs Overweight	5.08	0.26	4.77	0.17
CLPS	colipase, pancreatic	1.36	0.011	Obese up vs Overweight	3.74	0.23	3.48	0.36
FAM83F	family with sequence similarity 83, member F	1.36	0.030	Obese up vs Overweight	4.89	0.28	4.64	0.34
TBR1	T-box, brain, 1	1.36	0.034	Obese up vs Overweight	3.58	0.26	3.25	0.34
OR111	olfactory receptor, family 1, subfamily I, member 1	1.36	0.023	Obese up vs Overweight	4.55	0.24	4.19	0.31
LINC00511	long intergenic non-protein coding RNA 511	1.36	0.039	Obese up vs Overweight	4.84	0.28	4.46	0.17
PRKAR1B	protein kinase, cAMP-dependent, regulatory, type I, beta	1.36	0.033	Obese up vs Overweight	4.18	0.32	4.05	0.38
KLK5	kallikrein related peptidase 5	1.36	0.046	Obese up vs Overweight	5.62	0.31	5.40	0.36
REG3G	regenerating islet-derived 3 gamma	1.36	0.030	Obese up vs Overweight	4.88	0.27	4.41	0.21
UCN2	urocortin 2	1.36	0.006	Obese up vs Overweight	4.59	0.20	4.17	0.23
PRSS46	protease, serine 46	1.36	0.041	Obese up vs Overweight	4.56	0.29	4.23	0.16
IGFBP2	insulin like growth factor binding protein 2	1.36	0.019	Obese up vs Overweight	4.60	0.26	4.30	0.12
KRTAP10-6	keratin associated protein 10-6	1.36	0.042	Obese up vs Overweight	7.18	0.28	6.79	0.23
TNIP3	TNFAIP3 interacting protein 3	1.36	0.039	Obese up vs Overweight	3.41	0.28	3.10	0.22
ACADS	acyl-CoA dehydrogenase, C-2 to C-3 short chain	1.36	0.048	Obese up vs Overweight	5.53	0.26	5.16	0.46
CENPH	centromere protein H	1.36	0.030	Obese up vs Overweight	3.56	0.32	3.40	0.08
LTB4R	leukotriene B4 receptor	1.36	0.018	Obese up vs Overweight	5.27	0.24	4.89	0.14
NUDT4	nudix hydrolase 4	1.36	0.018	Obese up vs Overweight	4.65	0.32	4.55	0.14
GC	group-specific component (vitamin D binding protein)	1.36	0.027	Obese up vs Overweight	4.03	0.28	3.83	0.49
RBP3	retinol binding protein 3, interstitial	1.36	0.032	Obese up vs Overweight	4.18	0.25	3.75	0.32
IGFALS	insulin-like growth factor binding protein, acid labile subunit	1.36	0.016	Obese up vs Overweight	6.00	0.24	5.68	0.11
KLF13	Kruppel-like factor 13	1.36	0.018	Obese up vs Overweight	5.63	0.27	5.38	0.04
NOS1AP	nitric oxide synthase 1 (neuronal) adaptor protein	1.36	0.011	Obese up vs Overweight	5.83	0.24	5.53	0.10
MSH2	mutS homolog 2	1.36	0.045	Obese up vs Overweight	4.42	0.30	4.10	0.13
FSCN3	fascin actin-bundling protein 3, testicular	1.36	0.038	Obese up vs Overweight	4.73	0.27	4.37	0.25
THEG	theg spermatid protein	1.36	0.030	Obese up vs Overweight	3.87	0.28	3.55	0.09
MYT1L-AS1	MYT1L antisense RNA 1	1.36	0.050	Obese up vs Overweight	4.47	0.33	4.29	0.27
KPNA7	karyopherin alpha 7 (importin alpha 8)	1.35	0.031	Obese up vs Overweight	3.71	0.27	3.38	0.13
PRKAG3	protein kinase, AMP-activated, gamma 3 non-catalytic subunit	1.35	0.030	Obese up vs Overweight	4.70	0.25	4.36	0.30
PRR36	proline rich 36	1.35	0.049	Obese up vs Overweight	5.20	0.26	4.87	0.52
ZNF48	zinc finger protein 48	1.35	0.023	Obese up vs Overweight	5.77	0.27	5.56	0.35
KIF25-AS1	KIF25 antisense RNA 1	1.35	0.050	Obese up vs Overweight	4.44	0.31	4.16	0.08
LINC00524	long intergenic non-protein coding RNA 524	1.35	0.015	Obese up vs Overweight	4.36	0.25	4.01	0.14
KCNAB3	potassium channel, voltage gated subfamily A regulatory beta subunit 3	1.35	0.017	Obese up vs Overweight	4.16	0.25	3.77	0.14
RSG1	REM2 and RAB-like small GTPase 1	1.35	0.011	Obese up vs Overweight	5.74	0.23	5.44	0.24
TRIM45	tripartite motif containing 45	1.35	0.013	Obese up vs Overweight	4.91	0.22	4.53	0.18
HNF4A	hepatocyte nuclear factor 4, alpha	1.35	0.044	Obese up vs Overweight	4.85	0.29	4.63	0.41
ADORA2A	adenosine A2a receptor	1.35	0.018	Obese up vs Overweight	5.69	0.22	5.42	0.43

<i>BCKDHA</i>	branched chain keto acid dehydrogenase E1, alpha polypeptide	1.35	0.043	Obese up vs Overweight	5.41	0.29	5.16	0.31
<i>GNAS-AS1</i>	GNAS antisense RNA 1	1.35	0.018	Obese up vs Overweight	4.75	0.24	4.46	0.23
<i>CPNE6</i>	copine VI (neuronal)	1.35	0.040	Obese up vs Overweight	5.25	0.27	4.94	0.27
<i>CRYGA</i>	crystallin gamma A	1.35	0.023	Obese up vs Overweight	5.17	0.27	4.94	0.26
<i>TTY7B</i>	testis-specific transcript, Y-linked 7B (non-protein coding)	1.35	0.028	Obese up vs Overweight	4.49	0.26	4.18	0.18
<i>OPRM1</i>	opioid receptor, mu 1	1.35	0.026	Obese up vs Overweight	4.02	0.26	3.73	0.26
<i>SCN5A</i>	sodium channel, voltage gated, type V alpha subunit	1.35	0.020	Obese up vs Overweight	4.41	0.22	4.02	0.32
<i>ACR</i>	acrosin	1.35	0.018	Obese up vs Overweight	5.58	0.25	5.30	0.22
<i>FAM171A2</i>	family with sequence similarity 171, member A2	1.35	0.048	Obese up vs Overweight	5.31	0.22	4.92	0.56
<i>UBE2E2-AS1</i>	UBE2E2 antisense RNA 1 (head to head)	1.35	0.047	Obese up vs Overweight	3.43	0.29	3.05	0.04
<i>SLC2A11</i>	solute carrier family 2 (facilitated glucose transporter), member 11	1.35	0.031	Obese up vs Overweight	5.47	0.26	5.17	0.32
<i>HCRTR2</i>	hypocretin (orexin) receptor 2	1.35	0.007	Obese up vs Overweight	4.23	0.20	3.78	0.14
<i>SYNGR1</i>	synaptogyrin 1	1.35	0.042	Obese up vs Overweight	6.35	0.28	6.03	0.24
<i>SYPL2</i>	synaptophysin-like 2	1.35	0.017	Obese up vs Overweight	5.32	0.20	4.91	0.39
<i>TAC4</i>	tachykinin 4 (hemokinin)	1.35	0.033	Obese up vs Overweight	6.30	0.25	5.89	0.27
<i>SLC12A7</i>	solute carrier family 12 (potassium	1.35	0.040	Obese up vs Overweight	4.23	0.25	3.94	0.41
<i>AMIGO1</i>	adhesion molecule with Ig-like domain 1	1.35	0.041	Obese up vs Overweight	5.74	0.27	5.34	0.27
<i>SPHKAP</i>	SPHK1 interactor, AKAP domain containing	1.35	0.015	Obese up vs Overweight	4.12	0.24	3.80	0.05
<i>SCN11A</i>	sodium channel, voltage gated, type XI alpha subunit	1.35	0.030	Obese up vs Overweight	4.19	0.24	3.88	0.51
<i>ZNF688</i>	zinc finger protein 688	1.35	0.007	Obese up vs Overweight	4.97	0.23	4.73	0.10
<i>TTY7</i>	testis-specific transcript, Y-linked 7 (non-protein coding)	1.34	0.028	Obese up vs Overweight	4.36	0.25	4.02	0.24
<i>LINC01425</i>	long intergenic non-protein coding RNA 1425	1.34	0.030	Obese up vs Overweight	3.57	0.29	3.26	0.20
<i>TMEM132B</i>	transmembrane protein 132B	1.34	0.042	Obese up vs Overweight	5.66	0.27	5.34	0.35
<i>MCF2L-AS1</i>	MCF2L antisense RNA 1	1.34	0.028	Obese up vs Overweight	5.01	0.29	4.81	0.17
<i>CPT1C</i>	carnitine palmitoyltransferase 1C	1.34	0.022	Obese up vs Overweight	5.49	0.23	5.17	0.41
<i>INCA1</i>	inhibitor of CDK, cyclin A1 interacting protein 1	1.34	0.030	Obese up vs Overweight	4.30	0.25	3.99	0.29
<i>LINC00251</i>	long intergenic non-protein coding RNA 251	1.34	0.026	Obese up vs Overweight	4.73	0.26	4.46	0.14
<i>SLC25A22</i>	solute carrier family 25 (mitochondrial carrier: glutamate), member 22	1.34	0.040	Obese up vs Overweight	4.96	0.26	4.66	0.34
<i>NKX2-2</i>	NK2 homeobox 2	1.34	0.011	Obese up vs Overweight	4.68	0.27	4.50	0.23
<i>SYN2</i>	synapsin II	1.34	0.008	Obese up vs Overweight	4.53	0.24	4.29	0.06
<i>MIR3649</i>	microRNA 3649	1.34	0.046	Obese up vs Overweight	2.82	0.28	2.44	0.23
<i>SARM1</i>	sterile alpha and TIR motif containing 1	1.34	0.036	Obese up vs Overweight	4.93	0.30	4.80	0.36
<i>FAM109B</i>	family with sequence similarity 109, member B	1.34	0.021	Obese up vs Overweight	6.21	0.29	6.03	0.09
<i>MPLKIP</i>	M-phase specific PLK1 interacting protein	1.34	0.017	Obese up vs Overweight	6.43	0.27	6.24	0.16
<i>BAIAP3</i>	BAI1-associated protein 3	1.34	0.030	Obese up vs Overweight	5.30	0.27	5.06	0.12
<i>ATXN7L2</i>	ataxin 7-like 2	1.34	0.012	Obese up vs Overweight	5.20	0.23	4.92	0.15
<i>SLC16A11</i>	solute carrier family 16, member 11	1.34	0.050	Obese up vs Overweight	4.60	0.27	4.21	0.25
<i>DRD1</i>	dopamine receptor D1	1.34	0.027	Obese up vs Overweight	4.37	0.24	4.00	0.13
<i>MED26</i>	mediator complex subunit 26	1.34	0.013	Obese up vs Overweight	5.24	0.24	4.94	0.09
<i>CLGN</i>	calmegin	1.34	0.045	Obese up vs Overweight	4.31	0.27	4.09	0.44
<i>ZC3H12B</i>	zinc finger CCCH-type containing 12B	1.34	0.007	Obese up vs Overweight	5.06	0.24	4.88	0.27

<i>DGCR5</i>	DiGeorge syndrome critical region gene 5 (non-protein coding)	1.34	0.027	Obese up vs Overweight	4.89	0.25	4.63	0.31
<i>LCT</i>	lactase	1.34	0.018	Obese up vs Overweight	4.27	0.28	4.11	0.23
<i>MIR122</i>	microRNA 122	1.34	0.040	Obese up vs Overweight	2.01	0.31	1.84	0.16
<i>EARS2</i>	glutamyl-tRNA synthetase 2, mitochondrial	1.33	0.012	Obese up vs Overweight	5.37	0.22	5.04	0.04
<i>LINC01491</i>	long intergenic non-protein coding RNA 1491	1.33	0.014	Obese up vs Overweight	3.48	0.24	3.21	0.11
<i>GRTP1</i>	growth hormone regulated TBC protein 1	1.33	0.016	Obese up vs Overweight	5.52	0.24	5.27	0.16
<i>LRRD1</i>	leucine-rich repeats and death domain containing 1	1.33	0.002	Obese up vs Overweight	2.64	0.17	2.32	0.08
<i>ACBD4</i>	acyl-CoA binding domain containing 4	1.33	0.006	Obese up vs Overweight	4.58	0.20	4.30	0.24
<i>GINS4</i>	GINS complex subunit 4 (Sld5 homolog)	1.33	0.049	Obese up vs Overweight	4.08	0.28	3.77	0.29
<i>MIR603</i>	microRNA 603	1.33	0.030	Obese up vs Overweight	3.82	0.27	3.54	0.16
<i>IL1R2</i>	interleukin 1 receptor, type II	1.33	0.013	Obese up vs Overweight	5.02	0.21	4.67	0.18
<i>TNNC1</i>	troponin C type 1 (slow)	1.33	0.049	Obese up vs Overweight	5.83	0.27	5.42	0.11
<i>ARHGEF4</i>	Rho guanine nucleotide exchange factor 4	1.33	0.013	Obese up vs Overweight	4.80	0.23	4.51	0.21
<i>RASD2</i>	RASD family, member 2	1.33	0.039	Obese up vs Overweight	5.10	0.26	4.83	0.30
<i>GRB7</i>	growth factor receptor bound protein 7	1.33	0.009	Obese up vs Overweight	4.75	0.23	4.54	0.18
<i>MIR1322</i>	microRNA 1322	1.33	0.021	Obese up vs Overweight	2.40	0.23	2.08	0.22
<i>FCN3</i>	ficolin (collagen	1.33	0.024	Obese up vs Overweight	5.38	0.24	5.13	0.29
<i>ZNF23</i>	zinc finger protein 23	1.33	0.023	Obese up vs Overweight	4.11	0.21	3.73	0.31
<i>RPL13A</i>	ribosomal protein L13a	1.33	0.008	Obese up vs Overweight	4.93	0.21	4.63	0.11
<i>MYL5</i>	myosin light chain 5	1.33	0.022	Obese up vs Overweight	5.82	0.24	5.50	0.12
<i>PCAT18</i>	prostate cancer associated transcript 18 (non-protein coding)	1.33	0.011	Obese up vs Overweight	2.69	0.23	2.44	0.12
<i>GPRIN2</i>	G protein regulated inducer of neurite outgrowth 2	1.33	0.041	Obese up vs Overweight	5.79	0.26	5.56	0.38
<i>HDHD3</i>	haloacid dehalogenase-like hydrolase domain containing 3	1.33	0.043	Obese up vs Overweight	5.75	0.26	5.44	0.22
<i>FAIM2</i>	Fas apoptotic inhibitory molecule 2	1.33	0.013	Obese up vs Overweight	5.74	0.22	5.53	0.33
<i>PF4V1</i>	platelet factor 4 variant 1	1.33	0.028	Obese up vs Overweight	5.30	0.25	5.00	0.21
<i>ZNF384</i>	zinc finger protein 384	1.33	0.012	Obese up vs Overweight	6.47	0.21	6.12	0.18
<i>TRAPPC3L</i>	trafficking protein particle complex 3-like	1.33	0.037	Obese up vs Overweight	2.74	0.26	2.40	0.15
<i>RLTPR</i>	RGD motif, leucine rich repeats, tropomodulin domain and proline-rich containing	1.33	0.004	Obese up vs Overweight	4.56	0.18	4.24	0.12
<i>PPP1R16A</i>	protein phosphatase 1, regulatory subunit 16A	1.33	0.032	Obese up vs Overweight	4.57	0.25	4.30	0.31
<i>MIR200B</i>	microRNA 200b	1.33	0.017	Obese up vs Overweight	3.91	0.24	3.71	0.30
<i>FAM167A-AS1</i>	FAM167A antisense RNA 1	1.33	0.047	Obese up vs Overweight	4.32	0.31	4.11	0.11
<i>RSBN1</i>	round spermatid basic protein 1	1.33	0.014	Obese up vs Overweight	6.49	0.24	6.22	0.11
<i>MIR1256</i>	microRNA 1256	1.33	0.022	Obese up vs Overweight	2.17	0.32	1.96	0.09
<i>FGF3</i>	fibroblast growth factor 3	1.33	0.029	Obese up vs Overweight	4.36	0.22	4.09	0.42
<i>ADGRD2</i>	adhesion G protein-coupled receptor D2	1.33	0.011	Obese up vs Overweight	5.38	0.21	5.12	0.24
<i>MIR383</i>	microRNA 383	1.33	0.005	Obese up vs Overweight	5.50	0.21	5.23	0.12
<i>SYNPR-AS1</i>	SYNPR antisense RNA 1	1.32	0.036	Obese up vs Overweight	3.14	0.26	2.90	0.29
<i>XKR5</i>	X-linked Kx blood group related 5	1.32	0.018	Obese up vs Overweight	4.22	0.24	4.04	0.34
<i>GLP1R</i>	glucagon-like peptide 1 receptor	1.32	0.030	Obese up vs Overweight	4.99	0.23	4.73	0.39
<i>MIR519B</i>	microRNA 519b	1.32	0.044	Obese up vs Overweight	1.87	0.26	1.49	0.13

<i>PLEKHA7</i>	pleckstrin homology domain containing, family A member 7	1.32	0.049	Obese up vs Overweight	4.81	0.28	4.59	0.27
<i>PDE6B</i>	phosphodiesterase 6B, cGMP-specific, rod, beta	1.32	0.026	Obese up vs Overweight	4.34	0.27	4.16	0.17
<i>LINC00479</i>	long intergenic non-protein coding RNA 479	1.32	0.028	Obese up vs Overweight	4.07	0.27	3.90	0.26
<i>ONECUT3</i>	one cut homeobox 3	1.32	0.032	Obese up vs Overweight	4.81	0.26	4.55	0.05
<i>TMEM147-AS1</i>	TMEM147 antisense RNA 1	1.32	0.029	Obese up vs Overweight	5.82	0.25	5.53	0.07
<i>WWC2-AS2</i>	WWC2 antisense RNA 2	1.32	0.012	Obese up vs Overweight	4.10	0.25	3.86	0.27
<i>CALML3-AS1</i>	CALML3 antisense RNA 1	1.32	0.023	Obese up vs Overweight	3.81	0.20	3.47	0.36
<i>FUT1</i>	fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood group)	1.32	0.044	Obese up vs Overweight	4.80	0.28	4.62	0.29
<i>EPOR</i>	erythropoietin receptor	1.32	0.041	Obese up vs Overweight	5.28	0.25	4.91	0.26
<i>KCNF1</i>	potassium channel, voltage gated modifier subfamily F, member 1	1.32	0.044	Obese up vs Overweight	6.00	0.23	5.66	0.38
<i>ZNF853</i>	zinc finger protein 853	1.32	0.034	Obese up vs Overweight	5.05	0.27	4.86	0.26
<i>FAM200A</i>	family with sequence similarity 200, member A	1.32	0.033	Obese up vs Overweight	5.33	0.26	5.12	0.28
<i>SPIRE2</i>	spire-type actin nucleation factor 2	1.32	0.045	Obese up vs Overweight	4.73	0.26	4.43	0.15
<i>SMARCD3</i>	SWI	1.32	0.048	Obese up vs Overweight	5.24	0.25	4.83	0.25
<i>CIPC</i>	CLOCK-interacting pacemaker	1.32	0.003	Obese up vs Overweight	5.60	0.21	5.39	0.21
<i>ZNF541</i>	zinc finger protein 541	1.31	0.029	Obese up vs Overweight	4.43	0.24	4.16	0.17
<i>EXOSC6</i>	exosome component 6	1.31	0.048	Obese up vs Overweight	6.77	0.28	6.54	0.20
<i>TTY19</i>	testis-specific transcript, Y-linked 19 (non-protein coding)	1.31	0.044	Obese up vs Overweight	2.86	0.28	2.62	0.11
<i>OR2C3</i>	olfactory receptor, family 2, subfamily C, member 3	1.31	0.027	Obese up vs Overweight	3.70	0.26	3.52	0.26
<i>UPB1</i>	ureidopropionase, beta	1.31	0.006	Obese up vs Overweight	4.36	0.20	4.09	0.08
<i>CWH43</i>	cell wall biogenesis 43 C-terminal homolog	1.31	0.033	Obese up vs Overweight	3.79	0.25	3.56	0.31
<i>LINC00452</i>	long intergenic non-protein coding RNA 452	1.31	0.021	Obese up vs Overweight	4.70	0.24	4.47	0.21
<i>GREB1L</i>	growth regulation by estrogen in breast cancer-like	1.31	0.040	Obese up vs Overweight	4.21	0.26	3.88	0.10
<i>ABCB9</i>	ATP binding cassette subfamily B member 9	1.31	0.013	Obese up vs Overweight	4.79	0.24	4.59	0.19
<i>CATSPERD</i>	catsper channel auxiliary subunit delta	1.31	0.021	Obese up vs Overweight	4.52	0.23	4.30	0.28
<i>ADGRF4</i>	adhesion G protein-coupled receptor F4	1.31	0.026	Obese up vs Overweight	3.37	0.31	3.32	0.27
<i>PDE6G</i>	phosphodiesterase 6G, cGMP-specific, rod, gamma	1.31	0.041	Obese up vs Overweight	5.90	0.25	5.64	0.30
<i>LMAN1L</i>	lectin, mannose-binding, 1 like	1.31	0.021	Obese up vs Overweight	5.08	0.24	4.88	0.24
<i>LINC00890</i>	long intergenic non-protein coding RNA 890	1.31	0.049	Obese up vs Overweight	3.34	0.28	3.17	0.39
<i>OR5K1</i>	olfactory receptor, family 5, subfamily K, member 1	1.31	0.040	Obese up vs Overweight	1.71	0.28	1.51	0.22
<i>PAX6</i>	paired box 6	1.31	0.009	Obese up vs Overweight	3.44	0.18	3.17	0.31
<i>TRIM9</i>	tripartite motif containing 9	1.31	0.014	Obese up vs Overweight	4.08	0.19	3.80	0.33
<i>OR5T3</i>	olfactory receptor, family 5, subfamily T, member 3	1.31	0.014	Obese up vs Overweight	2.05	0.28	1.75	0.07
<i>CALHM1</i>	calcium homeostasis modulator 1	1.31	0.048	Obese up vs Overweight	4.99	0.31	4.94	0.43
<i>TFAP2C</i>	transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma)	1.31	0.031	Obese up vs Overweight	4.54	0.25	4.30	0.13
<i>HSD17B1</i>	hydroxysteroid (17-beta) dehydrogenase 1	1.31	0.046	Obese up vs Overweight	5.68	0.25	5.32	0.22
<i>MFSD7</i>	major facilitator superfamily domain containing 7	1.31	0.001	Obese up vs Overweight	5.93	0.17	5.70	0.02
<i>TLX2</i>	T-cell leukemia homeobox 2	1.31	0.013	Obese up vs Overweight	5.43	0.21	5.14	0.09
<i>LAMB4</i>	laminin, beta 4	1.31	0.021	Obese up vs Overweight	3.64	0.23	3.37	0.11
<i>SLC45A3</i>	solute carrier family 45, member 3	1.31	0.002	Obese up vs Overweight	4.28	0.16	3.90	0.07
<i>DPP6</i>	dipeptidyl-peptidase 6	1.31	0.013	Obese up vs Overweight	4.01	0.22	3.74	0.06

<i>PLEKHD1</i>	pleckstrin homology domain containing, family D (with coiled-coil domains) member 1	1.31	0.024	Obese up vs Overweight	3.68	0.18	3.31	0.39
<i>ASIC5</i>	acid sensing ion channel family member 5	1.31	0.017	Obese up vs Overweight	3.14	0.22	2.91	0.28
<i>OTOP2</i>	otopetrin 2	1.31	0.042	Obese up vs Overweight	4.98	0.25	4.72	0.35
<i>DSCR4</i>	Down syndrome critical region 4	1.31	0.021	Obese up vs Overweight	3.77	0.22	3.52	0.23
<i>OOEP</i>	oocyte expressed protein	1.31	0.034	Obese up vs Overweight	5.28	0.24	4.88	0.18
<i>LINC00507</i>	long intergenic non-protein coding RNA 507	1.31	0.029	Obese up vs Overweight	3.84	0.23	3.55	0.21
<i>HIST1H4G</i>	histone cluster 1, H4g	1.31	0.007	Obese up vs Overweight	1.99	0.18	1.70	0.20
<i>AMBN</i>	ameloblastin	1.31	0.035	Obese up vs Overweight	4.65	0.25	4.38	0.03
<i>PQLC1</i>	PQ loop repeat containing 1	1.31	0.049	Obese up vs Overweight	6.14	0.26	5.84	0.35
<i>GRIK5</i>	glutamate receptor, ionotropic, kainate 5	1.31	0.009	Obese up vs Overweight	5.80	0.20	5.51	0.13
<i>MEIS2</i>	Meis homeobox 2	1.31	0.036	Obese up vs Overweight	5.08	0.26	4.85	0.12
<i>MIR4689</i>	microRNA 4689	1.31	0.027	Obese up vs Overweight	6.23	0.23	5.98	0.25
<i>RHOXF2</i>	Rhox homeobox family, member 2	1.31	0.042	Obese up vs Overweight	4.55	0.23	4.28	0.38
<i>CTNNA3</i>	catenin (cadherin-associated protein), alpha 3	1.31	0.013	Obese up vs Overweight	4.38	0.20	3.99	0.10
<i>MGAT4D</i>	MGAT4 family, member D	1.30	0.036	Obese up vs Overweight	2.78	0.26	2.51	0.15
<i>ESRRA</i>	estrogen-related receptor alpha	1.30	0.028	Obese up vs Overweight	5.15	0.23	4.85	0.11
<i>NDUFC2-KCTD14</i>	NDUFC2-KCTD14 readthrough	1.30	0.016	Obese up vs Overweight	6.29	0.23	6.10	0.26
<i>NR1H4</i>	nuclear receptor subfamily 1, group H, member 4	1.30	0.017	Obese up vs Overweight	3.77	0.20	3.49	0.22
<i>SEBOX</i>	SEBOX homeobox	1.30	0.049	Obese up vs Overweight	5.70	0.25	5.42	0.29
<i>SGPP2</i>	sphingosine-1-phosphate phosphatase 2	1.30	0.019	Obese up vs Overweight	4.93	0.22	4.64	0.07
<i>SPOCK2</i>	sparc	1.30	0.035	Obese up vs Overweight	4.95	0.26	4.78	0.24
<i>DUSP15</i>	dual specificity phosphatase 15	1.30	0.034	Obese up vs Overweight	5.05	0.22	4.72	0.26
<i>ANKFN1</i>	ankyrin-repeat and fibronectin type III domain containing 1	1.30	0.026	Obese up vs Overweight	3.94	0.30	3.75	0.12
<i>GLTPD2</i>	glycolipid transfer protein domain containing 2	1.30	0.021	Obese up vs Overweight	4.87	0.23	4.60	0.08
<i>MED30</i>	mediator complex subunit 30	1.30	0.037	Obese up vs Overweight	6.14	0.30	6.05	0.10
<i>FUK</i>	fucokinase	1.30	0.014	Obese up vs Overweight	4.55	0.20	4.27	0.24
<i>PBX4</i>	pre-B-cell leukemia homeobox 4	1.30	0.006	Obese up vs Overweight	5.16	0.18	4.92	0.26
<i>MIR653</i>	microRNA 653	1.30	0.035	Obese up vs Overweight	2.00	0.25	1.75	0.14
<i>LINC01299</i>	long intergenic non-protein coding RNA 1299	1.30	0.048	Obese up vs Overweight	4.73	0.29	4.57	0.09
<i>TINCR</i>	tissue differentiation-inducing non-protein coding RNA	1.30	0.023	Obese up vs Overweight	4.23	0.22	3.85	0.10
<i>KIAA2012</i>	KIAA2012	1.30	0.022	Obese up vs Overweight	4.68	0.20	4.36	0.28
<i>LRIT2</i>	leucine-rich repeat, immunoglobulin-like and transmembrane domains 2	1.30	0.029	Obese up vs Overweight	3.96	0.26	3.79	0.16
<i>DUSP26</i>	dual specificity phosphatase 26 (putative)	1.30	0.032	Obese up vs Overweight	5.12	0.27	4.90	0.22
<i>SEC24B-AS1</i>	SEC24B antisense RNA 1	1.30	0.022	Obese up vs Overweight	4.07	0.21	3.82	0.26
<i>TM4SF5</i>	transmembrane 4 L six family member 5	1.30	0.021	Obese up vs Overweight	4.33	0.21	4.00	0.21
<i>GJB1</i>	gap junction protein beta 1	1.30	0.032	Obese up vs Overweight	3.93	0.23	3.64	0.09
<i>ZNF835</i>	zinc finger protein 835	1.30	0.033	Obese up vs Overweight	3.17	0.24	2.87	0.05
<i>NCAPH2</i>	non-SMC condensin II complex subunit H2	1.30	0.023	Obese up vs Overweight	5.32	0.21	5.00	0.08
<i>GAL3ST2</i>	galactose-3-O-sulfotransferase 2	1.30	0.040	Obese up vs Overweight	5.39	0.23	5.03	0.25
<i>MUC3A</i>	mucin 3A, cell surface associated	1.30	0.041	Obese up vs Overweight	5.58	0.26	5.35	0.19
<i>HOXB6</i>	homeobox B6	1.30	0.001	Obese up vs Overweight	4.63	0.15	4.16	0.04
<i>CCDC62</i>	coiled-coil domain containing 62	1.30	0.017	Obese up vs Overweight	2.88	0.22	2.68	0.16

<i>LINC00254</i>	long intergenic non-protein coding RNA 254	1.30	0.033	Obese up vs Overweight	2.73	0.25	2.54	0.12
<i>LINC00032</i>	long intergenic non-protein coding RNA 32	1.30	0.046	Obese up vs Overweight	4.42	0.25	4.18	0.31
<i>NPDC1</i>	neural proliferation, differentiation and control, 1	1.30	0.036	Obese up vs Overweight	5.56	0.21	5.23	0.30
<i>NPBWR1</i>	neuropeptides B	1.30	0.030	Obese up vs Overweight	4.08	0.24	3.85	0.16
<i>FOXM1</i>	forkhead box M1	1.30	0.032	Obese up vs Overweight	4.61	0.23	4.20	0.21
<i>ARID3C</i>	AT rich interactive domain 3C (BRIGHT-like)	1.30	0.022	Obese up vs Overweight	4.79	0.22	4.49	0.21
<i>MAGEB6</i>	MAGE family member B6	1.30	0.018	Obese up vs Overweight	5.00	0.20	4.72	0.17
<i>IQCH-AS1</i>	IQCH antisense RNA 1	1.30	0.013	Obese up vs Overweight	4.98	0.22	4.76	0.07
<i>IFT22</i>	intraflagellar transport 22	1.29	0.043	Obese up vs Overweight	6.11	0.25	5.82	0.10
<i>LINC00544</i>	long intergenic non-protein coding RNA 544	1.29	0.024	Obese up vs Overweight	5.63	0.21	5.39	0.30
<i>LINC00933</i>	long intergenic non-protein coding RNA 933	1.29	0.049	Obese up vs Overweight	4.55	0.26	4.27	0.10
<i>MIR1251</i>	microRNA 1251	1.29	0.034	Obese up vs Overweight	3.68	0.23	3.41	0.32
<i>PRR7-AS1</i>	PRR7 antisense RNA 1	1.29	0.027	Obese up vs Overweight	4.86	0.25	4.65	0.08
<i>FAM163B</i>	family with sequence similarity 163, member B	1.29	0.011	Obese up vs Overweight	4.74	0.22	4.43	0.21
<i>CDC25A</i>	cell division cycle 25A	1.29	0.037	Obese up vs Overweight	4.50	0.23	4.22	0.28
<i>TSSC4</i>	tumor suppressing subtransferable candidate 4	1.29	0.019	Obese up vs Overweight	5.54	0.19	5.23	0.28
<i>TTY11</i>	testis-specific transcript, Y-linked 11 (non-protein coding)	1.29	0.040	Obese up vs Overweight	2.12	0.24	1.84	0.16
<i>DCHS2</i>	dachsous cadherin-related 2	1.29	0.021	Obese up vs Overweight	4.80	0.18	4.51	0.33
<i>LINC01389</i>	long intergenic non-protein coding RNA 1389	1.29	0.048	Obese up vs Overweight	5.13	0.27	4.98	0.32
<i>SP5</i>	Sp5 transcription factor	1.29	0.042	Obese up vs Overweight	5.02	0.25	4.82	0.28
<i>CDY2B</i>	chromodomain protein, Y-linked, 2B	1.29	0.015	Obese up vs Overweight	4.46	0.25	4.34	0.11
<i>PYDC2</i>	pyrin domain containing 2	1.29	0.019	Obese up vs Overweight	2.53	0.21	2.24	0.10
<i>FOXO6</i>	forkhead box O6	1.29	0.029	Obese up vs Overweight	5.66	0.20	5.45	0.42
<i>RABEP2</i>	rabaptin, RAB GTPase binding effector protein 2	1.29	0.011	Obese up vs Overweight	5.39	0.16	5.07	0.38
<i>ZNHIT2</i>	zinc finger, HIT-type containing 2	1.29	0.030	Obese up vs Overweight	5.59	0.24	5.38	0.12
<i>CACNA1B</i>	calcium channel, voltage-dependent, N type, alpha 1B subunit	1.29	0.029	Obese up vs Overweight	4.46	0.23	4.25	0.23
<i>ACTL7B</i>	actin-like 7B	1.29	0.043	Obese up vs Overweight	5.28	0.26	5.07	0.07
<i>H2BFWT</i>	H2B histone family, member W, testis-specific	1.29	0.028	Obese up vs Overweight	3.01	0.23	2.78	0.25
<i>PCSK4</i>	proprotein convertase subtilisin	1.29	0.032	Obese up vs Overweight	5.71	0.25	5.51	0.13
<i>LINC01431</i>	long intergenic non-protein coding RNA 1431	1.29	0.048	Obese up vs Overweight	5.02	0.25	4.71	0.01
<i>CA6</i>	carbonic anhydrase VI	1.29	0.033	Obese up vs Overweight	3.84	0.24	3.58	0.07
<i>CACNG7</i>	calcium channel, voltage-dependent, gamma subunit 7	1.29	0.022	Obese up vs Overweight	3.11	0.21	2.82	0.14
<i>ITIH1</i>	inter-alpha-trypsin inhibitor heavy chain 1	1.29	0.036	Obese up vs Overweight	4.84	0.25	4.64	0.13
<i>ANKS1B</i>	ankyrin repeat and sterile alpha motif domain containing 1B	1.29	0.039	Obese up vs Overweight	4.12	0.25	3.91	0.09
<i>TNFSF14</i>	tumor necrosis factor (ligand) superfamily, member 14	1.29	0.049	Obese up vs Overweight	5.76	0.24	5.35	0.15
<i>LRCOL1</i>	leucine rich colipase-like 1	1.29	0.018	Obese up vs Overweight	5.33	0.21	5.07	0.12
<i>DDC</i>	dopa decarboxylase	1.29	0.016	Obese up vs Overweight	5.15	0.20	4.92	0.19
<i>HCN4</i>	hyperpolarization activated cyclic nucleotide gated potassium channel 4	1.28	0.034	Obese up vs Overweight	5.35	0.21	5.10	0.31
<i>LINC01620</i>	long intergenic non-protein coding RNA 1620	1.28	0.040	Obese up vs Overweight	3.49	0.19	3.24	0.49
<i>P2RX4</i>	purinergic receptor P2X, ligand gated ion channel, 4	1.28	0.042	Obese up vs Overweight	5.31	0.25	4.97	0.21
<i>PNPLA5</i>	patatin-like phospholipase domain containing 5	1.28	0.020	Obese up vs Overweight	4.41	0.20	4.04	0.03
<i>IDH1-AS1</i>	IDH1 antisense RNA 1	1.28	0.029	Obese up vs Overweight	4.08	0.21	3.80	0.18

<i>ITGAD</i>	integrin alpha D	1.28	0.049	Obese up vs Overweight	4.51	0.25	4.23	0.09
<i>LINC01063</i>	long intergenic non-protein coding RNA 1063	1.28	0.049	Obese up vs Overweight	5.38	0.23	5.00	0.25
<i>CNGB3</i>	cyclic nucleotide gated channel beta 3	1.28	0.007	Obese up vs Overweight	4.41	0.15	4.12	0.25
<i>SLC6A5</i>	solute carrier family 6 (neurotransmitter transporter), member 5	1.28	0.030	Obese up vs Overweight	4.01	0.22	3.79	0.31
<i>FCRL1</i>	Fc receptor-like 1	1.28	0.032	Obese up vs Overweight	4.56	0.22	4.28	0.10
<i>ALOX12B</i>	arachidonate 12-lipoxygenase, 12R type	1.28	0.049	Obese up vs Overweight	3.88	0.24	3.52	0.12
<i>MARCH3</i>	membrane associated ring finger 3	1.28	0.049	Obese up vs Overweight	5.10	0.26	4.90	0.11
<i>TUBB3</i>	tubulin, beta 3 class III	1.28	0.047	Obese up vs Overweight	5.06	0.23	4.66	0.18
<i>TSPY3</i>	testis specific protein, Y-linked 3	1.28	0.022	Obese up vs Overweight	4.23	0.21	3.92	0.12
<i>AGPAT2</i>	1-acylglycerol-3-phosphate O-acyltransferase 2	1.28	0.009	Obese up vs Overweight	5.90	0.19	5.62	0.03
<i>FLJ37035</i>	uncharacterized LOC399821	1.28	0.013	Obese up vs Overweight	4.46	0.22	4.27	0.13
<i>MNT</i>	MAX network transcriptional repressor	1.28	0.028	Obese up vs Overweight	5.75	0.21	5.41	0.14
<i>FFAR2</i>	free fatty acid receptor 2	1.28	0.036	Obese up vs Overweight	4.10	0.21	3.83	0.31
<i>KLK10</i>	kallikrein related peptidase 10	1.28	0.027	Obese up vs Overweight	5.26	0.20	4.99	0.24
<i>CSTF2</i>	cleavage stimulation factor, 3 pre-RNA, subunit 2	1.28	0.018	Obese up vs Overweight	5.33	0.23	5.17	0.08
<i>OVOL1</i>	ovo-like zinc finger 1	1.28	0.037	Obese up vs Overweight	4.22	0.23	3.92	0.08
<i>ALG14</i>	ALG14, UDP-N-acetylglucosaminyltransferase subunit	1.28	0.038	Obese up vs Overweight	6.97	0.26	6.77	0.09
<i>SORCS1</i>	sortilin-related VPS10 domain containing receptor 1	1.28	0.022	Obese up vs Overweight	4.42	0.20	4.13	0.17
<i>MRPL32</i>	mitochondrial ribosomal protein L32	1.28	0.013	Obese up vs Overweight	5.88	0.20	5.64	0.07
<i>GRIN1</i>	glutamate receptor, ionotropic, N-methyl D-aspartate 1	1.28	0.032	Obese up vs Overweight	4.04	0.24	3.90	0.26
<i>HDAC10</i>	histone deacetylase 10	1.27	0.030	Obese up vs Overweight	5.55	0.22	5.21	0.10
<i>DRAIC</i>	downregulated RNA in cancer, inhibitor of cell invasion and migration	1.27	0.034	Obese up vs Overweight	4.33	0.22	4.19	0.38
<i>LINC01235</i>	long intergenic non-protein coding RNA 1235	1.27	0.037	Obese up vs Overweight	5.76	0.24	5.58	0.20
<i>EVPL</i>	envoplakin	1.27	0.039	Obese up vs Overweight	5.99	0.19	5.64	0.37
<i>MSC</i>	musculin	1.27	0.044	Obese up vs Overweight	4.61	0.23	4.31	0.03
<i>DEFB115</i>	defensin, beta 115	1.27	0.034	Obese up vs Overweight	4.92	0.19	4.61	0.33
<i>ARMS2</i>	age-related maculopathy susceptibility 2	1.27	0.049	Obese up vs Overweight	5.20	0.24	4.87	0.12
<i>IDI1</i>	isopentenyl-diphosphate delta isomerase 1	1.27	0.037	Obese up vs Overweight	5.21	0.28	5.15	0.14
<i>IGLV9-49</i>	immunoglobulin lambda variable 9-49	1.27	0.013	Obese up vs Overweight	4.54	0.18	4.25	0.19
<i>HTATIP2</i>	HIV-1 Tat interactive protein 2	1.27	0.033	Obese up vs Overweight	5.07	0.27	4.97	0.11
<i>LINC01530</i>	long intergenic non-protein coding RNA 1530	1.27	0.042	Obese up vs Overweight	4.41	0.25	4.24	0.11
<i>PBXIP1</i>	pre-B-cell leukemia homeobox interacting protein 1	1.27	0.047	Obese up vs Overweight	5.16	0.23	4.90	0.25
<i>RXFP3</i>	relaxin	1.27	0.031	Obese up vs Overweight	4.83	0.21	4.56	0.19
<i>LSAMP</i>	limbic system-associated membrane protein	1.27	0.016	Obese up vs Overweight	5.15	0.15	4.90	0.35
<i>SIGLEC10</i>	sialic acid binding Ig-like lectin 10	1.27	0.036	Obese up vs Overweight	5.31	0.22	5.06	0.11
<i>B3GNT5</i>	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5	1.27	0.032	Obese up vs Overweight	4.85	0.21	4.57	0.02
<i>LINC00882</i>	long intergenic non-protein coding RNA 882	1.27	0.032	Obese up vs Overweight	4.62	0.22	4.45	0.21
<i>LINC00521</i>	long intergenic non-protein coding RNA 521	1.27	0.032	Obese up vs Overweight	4.63	0.21	4.34	0.23
<i>PAK6</i>	p21 protein (Cdc42	1.26	0.038	Obese up vs Overweight	4.55	0.21	4.28	0.30
<i>CCDC60</i>	coiled-coil domain containing 60	1.26	0.039	Obese up vs Overweight	4.61	0.23	4.38	0.05
<i>RPS6KA2-AS1</i>	RPS6KA2 antisense RNA 1	1.26	0.027	Obese up vs Overweight	4.91	0.22	4.74	0.26
<i>POU2F3</i>	POU class 2 homeobox 3	1.26	0.047	Obese up vs Overweight	5.21	0.23	5.00	0.17

<i>LINC00381</i>	long intergenic non-protein coding RNA 381	1.26	0.039	Obese up vs Overweight	2.57	0.23	2.37	0.15
<i>MINOS1</i>	mitochondrial inner membrane organizing system 1	1.26	0.014	Obese up vs Overweight	5.58	0.20	5.38	0.15
<i>A4GALT</i>	alpha 1,4-galactosyltransferase	1.26	0.022	Obese up vs Overweight	5.92	0.21	5.67	0.22
<i>LINC01584</i>	long intergenic non-protein coding RNA 1584	1.26	0.016	Obese up vs Overweight	4.39	0.20	4.17	0.09
<i>TADA2B</i>	transcriptional adaptor 2B	1.26	0.036	Obese up vs Overweight	5.61	0.21	5.37	0.18
<i>GP2</i>	glycoprotein 2 (zymogen granule membrane)	1.26	0.029	Obese up vs Overweight	4.62	0.21	4.42	0.18
<i>ID2-AS1</i>	ID2 antisense RNA 1 (head to head)	1.26	0.028	Obese up vs Overweight	5.39	0.20	5.21	0.27
<i>MMP15</i>	matrix metalloproteinase 15 (membrane-inserted)	1.26	0.024	Obese up vs Overweight	4.99	0.22	4.80	0.11
<i>FAM224B</i>	family with sequence similarity 224, member B (non-protein coding)	1.26	0.045	Obese up vs Overweight	5.22	0.22	5.01	0.26
<i>UNC5CL</i>	unc-5 family C-terminal like	1.26	0.043	Obese up vs Overweight	5.27	0.26	5.16	0.10
<i>MIR4458</i>	microRNA 4458	1.26	0.010	Obese up vs Overweight	4.60	0.20	4.45	0.15
<i>VSX2</i>	visual system homeobox 2	1.26	0.040	Obese up vs Overweight	3.94	0.19	3.58	0.32
<i>COMMD6</i>	COMM domain containing 6	1.26	0.040	Obese up vs Overweight	5.14	0.23	4.96	0.13
<i>GSX2</i>	GS homeobox 2	1.26	0.046	Obese up vs Overweight	5.20	0.25	5.07	0.18
<i>DDTL</i>	D-dopachrome tautomerase-like	1.26	0.046	Obese up vs Overweight	5.64	0.23	5.41	0.15
<i>RNF212B</i>	ring finger protein 212B	1.26	0.033	Obese up vs Overweight	4.27	0.21	4.03	0.01
<i>NAIF1</i>	nuclear apoptosis inducing factor 1	1.26	0.040	Obese up vs Overweight	4.54	0.21	4.28	0.21
<i>IGHJ1</i>	immunoglobulin heavy joining 1	1.26	0.006	Obese up vs Overweight	7.50	0.14	7.13	0.19
<i>NLRP4</i>	NLR family, pyrin domain containing 4	1.26	0.041	Obese up vs Overweight	4.39	0.23	4.25	0.30
<i>PLD1</i>	phospholipase D1, phosphatidylcholine-specific	1.26	0.032	Obese up vs Overweight	5.27	0.21	5.09	0.22
<i>IGSF1</i>	immunoglobulin superfamily, member 1	1.26	0.045	Obese up vs Overweight	4.31	0.22	4.07	0.09
<i>ARPC1A</i>	actin related protein 2	1.25	0.044	Obese up vs Overweight	6.01	0.21	5.72	0.11
<i>KCNJ5</i>	potassium channel, inwardly rectifying subfamily J, member 5	1.25	0.046	Obese up vs Overweight	4.10	0.24	3.92	0.11
<i>HCG9</i>	HLA complex group 9 (non-protein coding)	1.25	0.050	Obese up vs Overweight	6.01	0.23	5.79	0.11
<i>XKR3</i>	X-linked Kx blood group related 3	1.25	0.046	Obese up vs Overweight	3.21	0.25	2.99	0.07
<i>SHF</i>	Src homology 2 domain containing F	1.25	0.019	Obese up vs Overweight	5.22	0.17	4.94	0.22
<i>LINC00378</i>	long intergenic non-protein coding RNA 378	1.25	0.040	Obese up vs Overweight	3.09	0.17	2.88	0.46
<i>SMTNL2</i>	smoothelin-like 2	1.25	0.037	Obese up vs Overweight	5.24	0.20	5.03	0.30
<i>ATP5SL</i>	ATP5S-like	1.25	0.021	Obese up vs Overweight	5.76	0.26	5.63	0.14
<i>PAH</i>	phenylalanine hydroxylase	1.25	0.044	Obese up vs Overweight	3.74	0.20	3.44	0.25
<i>TAS2R7</i>	taste receptor, type 2, member 7	1.25	0.018	Obese up vs Overweight	1.99	0.18	1.78	0.15
<i>SLCO1B3</i>	solute carrier organic anion transporter family, member 1B3	1.25	0.036	Obese up vs Overweight	2.70	0.23	2.56	0.19
<i>OPN4</i>	opsin 4	1.25	0.048	Obese up vs Overweight	5.66	0.23	5.43	0.08
<i>PET117</i>	PET117 homolog	1.25	0.043	Obese up vs Overweight	4.94	0.21	4.66	0.16
<i>CARNS1</i>	carnosine synthase 1	1.25	0.049	Obese up vs Overweight	5.07	0.22	4.86	0.20
<i>SEPT1</i>	septin 1	1.25	0.050	Obese up vs Overweight	5.37	0.23	5.24	0.32
<i>MORN1</i>	MORN repeat containing 1	1.25	0.026	Obese up vs Overweight	4.80	0.20	4.57	0.03
<i>SFTA2</i>	surfactant associated 2	1.25	0.042	Obese up vs Overweight	4.85	0.19	4.70	0.42
<i>MUC5B</i>	mucin 5B, oligomeric mucus	1.25	0.022	Obese up vs Overweight	4.89	0.18	4.62	0.18
<i>LINC01257</i>	long intergenic non-protein coding RNA 1257	1.25	0.038	Obese up vs Overweight	4.70	0.18	4.45	0.29
<i>ZNF134</i>	zinc finger protein 134	1.25	0.012	Obese up vs Overweight	5.85	0.18	5.57	0.18
<i>ZNF689</i>	zinc finger protein 689	1.25	0.050	Obese up vs Overweight	4.29	0.22	4.07	0.18

<i>LINC01305</i>	long intergenic non-protein coding RNA 1305	1.25	0.039	Obese up vs Overweight	4.03	0.20	3.70	0.25
<i>IL21</i>	interleukin 21	1.25	0.039	Obese up vs Overweight	2.32	0.23	2.18	0.10
<i>ZNF775</i>	zinc finger protein 775	1.25	0.049	Obese up vs Overweight	4.91	0.18	4.59	0.34
<i>SOAT2</i>	sterol O-acyltransferase 2	1.25	0.036	Obese up vs Overweight	5.08	0.20	4.74	0.11
<i>NPM2</i>	nucleophosmin	1.25	0.027	Obese up vs Overweight	5.17	0.18	4.86	0.19
<i>OR52W1</i>	olfactory receptor, family 52, subfamily W, member 1	1.24	0.045	Obese up vs Overweight	5.50	0.23	5.34	0.06
<i>WDR90</i>	WD repeat domain 90	1.24	0.019	Obese up vs Overweight	5.53	0.18	5.33	0.19
<i>DGCR10</i>	DiGeorge syndrome critical region gene 10 (non-protein coding)	1.24	0.025	Obese up vs Overweight	3.26	0.20	3.08	0.15
<i>C1QTNF1-AS1</i>	C1QTNF1 antisense RNA 1	1.24	0.041	Obese up vs Overweight	3.51	0.29	3.51	0.12
<i>ADAMTS18</i>	ADAM metalloproteinase with thrombospondin type 1 motif 18	1.24	0.022	Obese up vs Overweight	4.34	0.19	4.11	0.04
<i>RASL10A</i>	RAS-like, family 10, member A	1.24	0.050	Obese up vs Overweight	4.70	0.22	4.55	0.24
<i>MLST8</i>	MTOR associated protein, LST8 homolog	1.24	0.017	Obese up vs Overweight	5.98	0.16	5.71	0.14
<i>SOWAHB</i>	sosondowah ankyrin repeat domain family member B	1.24	0.036	Obese up vs Overweight	4.69	0.21	4.55	0.39
<i>MIR4735</i>	microRNA 4735	1.24	0.034	Obese up vs Overweight	1.75	0.21	1.55	0.09
<i>TMEM8B</i>	transmembrane protein 8B	1.24	0.020	Obese up vs Overweight	6.26	0.21	6.11	0.11
<i>MGARP</i>	mitochondria localized glutamic acid rich protein	1.24	0.047	Obese up vs Overweight	5.04	0.26	4.89	0.11
<i>SLC25A44</i>	solute carrier family 25, member 44	1.24	0.034	Obese up vs Overweight	5.19	0.19	4.95	0.18
<i>LINGO1</i>	leucine rich repeat and lg domain containing 1	1.24	0.042	Obese up vs Overweight	5.28	0.18	4.99	0.26
<i>USP19</i>	ubiquitin specific peptidase 19	1.24	0.016	Obese up vs Overweight	5.51	0.15	5.18	0.22
<i>GJB7</i>	gap junction protein beta 7	1.24	0.044	Obese up vs Overweight	3.54	0.20	3.35	0.25
<i>SREBF1</i>	sterol regulatory element binding transcription factor 1	1.24	0.041	Obese up vs Overweight	5.53	0.16	5.30	0.39
<i>CD244</i>	CD244 molecule, natural killer cell receptor 2B4	1.24	0.042	Obese up vs Overweight	3.97	0.19	3.75	0.28
<i>FAM174B</i>	family with sequence similarity 174, member B	1.24	0.047	Obese up vs Overweight	5.58	0.23	5.47	0.19
<i>CCDC114</i>	coiled-coil domain containing 114	1.24	0.013	Obese up vs Overweight	4.60	0.17	4.41	0.15
<i>MIR9-3HG</i>	MIR9-3 host gene	1.24	0.036	Obese up vs Overweight	4.81	0.21	4.59	0.14
<i>PPAN-P2RY11</i>	PPAN-P2RY11 readthrough	1.24	0.019	Obese up vs Overweight	6.01	0.18	5.76	0.18
<i>PRMT7</i>	protein arginine methyltransferase 7	1.24	0.028	Obese up vs Overweight	5.25	0.19	5.02	0.12
<i>GDAP1L1</i>	ganglioside induced differentiation associated protein 1-like 1	1.24	0.036	Obese up vs Overweight	4.93	0.21	4.77	0.16
<i>FAM50B</i>	family with sequence similarity 50, member B	1.23	0.025	Obese up vs Overweight	6.10	0.21	5.99	0.19
<i>JUP</i>	junction plakoglobin	1.23	0.049	Obese up vs Overweight	6.12	0.22	5.97	0.13
<i>LPIN3</i>	lipin 3	1.23	0.038	Obese up vs Overweight	6.14	0.20	5.94	0.22
<i>CHAF1B</i>	chromatin assembly factor 1, subunit B (p60)	1.23	0.035	Obese up vs Overweight	5.08	0.20	4.88	0.07
<i>ANAPC10</i>	anaphase promoting complex subunit 10	1.23	0.008	Obese up vs Overweight	4.79	0.15	4.56	0.07
<i>LRGUK</i>	leucine-rich repeats and guanylate kinase domain containing	1.23	0.013	Obese up vs Overweight	4.90	0.18	4.74	0.08
<i>HSD17B10</i>	hydroxysteroid (17-beta) dehydrogenase 10	1.23	0.047	Obese up vs Overweight	6.31	0.23	6.12	0.10
<i>SEPT3</i>	septin 3	1.23	0.048	Obese up vs Overweight	4.88	0.18	4.52	0.34
<i>DNAH9</i>	dynein, axonemal, heavy chain 9	1.23	0.032	Obese up vs Overweight	4.47	0.17	4.20	0.39
<i>MOAP1</i>	modulator of apoptosis 1	1.23	0.030	Obese up vs Overweight	5.60	0.21	5.38	0.10
<i>MIR4766</i>	microRNA 4766	1.23	0.035	Obese up vs Overweight	1.84	0.19	1.56	0.02
<i>EHHADH</i>	enoyl-CoA, hydratase	1.22	0.039	Obese up vs Overweight	4.87	0.19	4.61	0.18
<i>SLC25A45</i>	solute carrier family 25, member 45	1.22	0.046	Obese up vs Overweight	5.35	0.19	5.18	0.25

<i>TIGD6</i>	tigger transposable element derived 6	1.22	0.048	Obese up vs Overweight	5.35	0.19	5.09	0.21
<i>MEOX1</i>	mesenchyme homeobox 1	1.22	0.020	Obese up vs Overweight	5.84	0.17	5.56	0.04
<i>TCEANC2</i>	transcription elongation factor A (SII) N-terminal and central domain containing 2	1.22	0.037	Obese up vs Overweight	3.38	0.18	3.11	0.16
<i>CCDC157</i>	coiled-coil domain containing 157	1.22	0.039	Obese up vs Overweight	5.28	0.19	5.03	0.22
<i>PTPRH</i>	protein tyrosine phosphatase, receptor type, H	1.22	0.024	Obese up vs Overweight	5.15	0.22	5.01	0.14
<i>CHRNA7</i>	cholinergic receptor, nicotinic gamma	1.22	0.046	Obese up vs Overweight	4.84	0.20	4.68	0.22
<i>THOC7-AS1</i>	THOC7 antisense RNA 1	1.22	0.038	Obese up vs Overweight	3.38	0.21	3.25	0.08
<i>PARK2</i>	parkin RBR E3 ubiquitin protein ligase	1.22	0.024	Obese up vs Overweight	5.75	0.17	5.47	0.06
<i>SLC5A10</i>	solute carrier family 5 (sodium	1.22	0.046	Obese up vs Overweight	5.01	0.19	4.81	0.17
<i>TMEM143</i>	transmembrane protein 143	1.22	0.032	Obese up vs Overweight	4.48	0.19	4.33	0.15
<i>FGF14-AS1</i>	FGF14 antisense RNA 1	1.22	0.040	Obese up vs Overweight	5.74	0.19	5.54	0.09
<i>CYP2D7</i>	cytochrome P450, family 2, subfamily D, polypeptide 7 (gene	1.22	0.048	Obese up vs Overweight	5.18	0.19	4.96	0.06
<i>SULT2B1</i>	sulfotransferase family 2B member 1	1.22	0.022	Obese up vs Overweight	5.31	0.17	5.17	0.26
<i>STRA6</i>	stimulated by retinoic acid 6	1.22	0.033	Obese up vs Overweight	5.34	0.18	5.13	0.11
<i>PPM1E</i>	protein phosphatase, Mg2+	1.21	0.044	Obese up vs Overweight	3.51	0.21	3.30	0.15
<i>CPO</i>	carboxypeptidase O	1.21	0.023	Obese up vs Overweight	4.96	0.16	4.75	0.14
<i>FAM87A</i>	family with sequence similarity 87, member A	1.21	0.041	Obese up vs Overweight	4.02	0.18	3.73	0.13
<i>UBXN11</i>	UBX domain protein 11	1.21	0.010	Obese up vs Overweight	4.04	0.14	3.88	0.24
<i>NT5C1B</i>	5-nucleotidase, cytosolic IB	1.21	0.031	Obese up vs Overweight	4.85	0.18	4.67	0.17
<i>PVRL3</i>	poliovirus receptor-related 3	1.21	0.049	Obese up vs Overweight	6.84	0.23	6.77	0.03
<i>LSR</i>	lipolysis stimulated lipoprotein receptor	1.21	0.047	Obese up vs Overweight	6.04	0.19	5.86	0.22
<i>COL17A1</i>	collagen, type XVII, alpha 1	1.21	0.047	Obese up vs Overweight	4.74	0.17	4.54	0.24
<i>LINC01237</i>	long intergenic non-protein coding RNA 1237	1.21	0.049	Obese up vs Overweight	5.37	0.20	5.25	0.21
<i>MIMT1</i>	MER1 repeat containing imprinted transcript 1 (non-protein coding)	1.21	0.041	Obese up vs Overweight	2.36	0.18	2.08	0.10
<i>PTPRQ</i>	protein tyrosine phosphatase, receptor type, Q	1.21	0.020	Obese up vs Overweight	3.00	0.15	2.82	0.19
<i>FGF13</i>	fibroblast growth factor 13	1.21	0.030	Obese up vs Overweight	5.03	0.21	4.96	0.14
<i>MS4A15</i>	membrane-spanning 4-domains, subfamily A, member 15	1.20	0.019	Obese up vs Overweight	4.68	0.14	4.48	0.20
<i>KCNC1</i>	potassium channel, voltage gated Shaw related subfamily C, member 1	1.20	0.029	Obese up vs Overweight	4.39	0.17	4.26	0.18
<i>E2F7</i>	E2F transcription factor 7	1.20	0.035	Obese up vs Overweight	4.49	0.18	4.38	0.17
<i>COX10</i>	COX10 heme A:farnesyltransferase cytochrome c oxidase assembly factor	1.20	0.034	Obese up vs Overweight	6.26	0.16	5.94	0.17
<i>RPL19</i>	ribosomal protein L19	1.20	0.032	Obese up vs Overweight	10.95	0.18	10.82	0.05
<i>ABAT</i>	4-aminobutyrate aminotransferase	1.20	0.037	Obese up vs Overweight	5.44	0.17	5.26	0.17
<i>LINC01143</i>	long intergenic non-protein coding RNA 1143	1.20	0.041	Obese up vs Overweight	4.96	0.15	4.68	0.24
<i>ST6GALNAC1</i>	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1	1.19	0.041	Obese up vs Overweight	4.06	0.18	3.93	0.15
<i>MYO1H</i>	myosin IH	1.19	0.035	Obese up vs Overweight	3.36	0.17	3.02	0.04
<i>NOS3</i>	nitric oxide synthase 3 (endothelial cell)	1.19	0.044	Obese up vs Overweight	5.00	0.19	4.87	0.25
<i>EGFL7</i>	EGF-like-domain, multiple 7	1.19	0.050	Obese up vs Overweight	5.56	0.16	5.31	0.17
<i>HGD</i>	homogentisate 1,2-dioxygenase	1.19	0.011	Obese up vs Overweight	3.89	0.14	3.77	0.12
<i>RPS21</i>	ribosomal protein S21	1.18	0.005	Obese up vs Overweight	8.93	0.12	8.76	0.07

<i>LINC00909</i>	long intergenic non-protein coding RNA 909	1.18	0.043	Obese up vs Overweight	4.86	0.19	4.78	0.16
<i>TSPAN17</i>	tetraspanin 17	1.18	0.047	Obese up vs Overweight	6.32	0.16	6.09	0.02
<i>SEMA4G</i>	semaphorin 4G	1.18	0.022	Obese up vs Overweight	5.34	0.12	5.12	0.22
<i>RPL28</i>	ribosomal protein L28	1.18	0.043	Obese up vs Overweight	5.38	0.17	5.24	0.09
<i>NOD2</i>	nucleotide-binding oligomerization domain containing 2	1.18	0.035	Obese up vs Overweight	4.25	0.13	4.02	0.20
<i>ABCG4</i>	ATP binding cassette subfamily G member 4	1.16	0.022	Obese up vs Overweight	4.92	0.13	4.77	0.18
<i>LINC00910</i>	long intergenic non-protein coding RNA 910	1.14	0.034	Obese up vs Overweight	1.71	0.11	1.55	0.13
<i>FPGT-TNNI3K</i>	FPGT-TNNI3K readthrough	-1.14	0.004	Obese down vs Overweight	5.51	0.10	5.63	0.08
<i>SEPT9</i>	septin 9	-1.16	0.009	Obese down vs Overweight	7.25	0.11	7.37	0.15
<i>TYK2</i>	tyrosine kinase 2	-1.16	0.035	Obese down vs Overweight	5.34	0.16	5.45	0.11
<i>TMEM223</i>	transmembrane protein 223	-1.16	0.037	Obese down vs Overweight	5.11	0.14	5.30	0.08
<i>INCENP</i>	inner centromere protein	-1.18	0.037	Obese down vs Overweight	4.91	0.17	5.12	0.08
<i>ZBED5</i>	zinc finger, BED-type containing 5	-1.18	0.039	Obese down vs Overweight	6.57	0.15	6.78	0.15
<i>FAM196B</i>	family with sequence similarity 196, member B	-1.19	0.019	Obese down vs Overweight	4.68	0.14	4.90	0.14
<i>POLG</i>	polymerase (DNA directed), gamma	-1.19	0.028	Obese down vs Overweight	6.03	0.15	6.19	0.22
<i>TEP1</i>	telomerase-associated protein 1	-1.20	0.024	Obese down vs Overweight	5.46	0.18	5.58	0.15
<i>TRIM56</i>	tripartite motif containing 56	-1.20	0.028	Obese down vs Overweight	6.35	0.19	6.47	0.08
<i>COPS5</i>	COP9 signalosome subunit 5	-1.21	0.038	Obese down vs Overweight	5.83	0.15	6.12	0.30
<i>RIC8B</i>	RIC8 guanine nucleotide exchange factor B	-1.22	0.027	Obese down vs Overweight	5.28	0.16	5.53	0.17
<i>LHFPL2</i>	lipoma HMGIC fusion partner-like 2	-1.23	0.050	Obese down vs Overweight	5.96	0.21	6.14	0.27
<i>NAALADL2</i>	N-acetylated alpha-linked acidic dipeptidase-like 2	-1.23	0.027	Obese down vs Overweight	5.72	0.18	5.96	0.07
<i>OXGR1</i>	oxoglutarate (alpha-ketoglutarate) receptor 1	-1.23	0.015	Obese down vs Overweight	4.51	0.18	4.72	0.10
<i>CUL9</i>	cullin 9	-1.23	0.010	Obese down vs Overweight	5.27	0.15	5.48	0.22
<i>FAM3C</i>	family with sequence similarity 3, member C	-1.23	0.028	Obese down vs Overweight	5.77	0.19	5.95	0.30
<i>DCUN1D2</i>	DCN1, defective in cullin neddylation 1, domain containing 2	-1.23	0.030	Obese down vs Overweight	5.39	0.17	5.65	0.28
<i>NOTCH3</i>	notch 3	-1.24	0.048	Obese down vs Overweight	5.62	0.25	5.72	0.15
<i>AZIN2</i>	antizyme inhibitor 2	-1.24	0.015	Obese down vs Overweight	5.43	0.17	5.62	0.19
<i>MTG1</i>	mitochondrial ribosome-associated GTPase 1	-1.24	0.046	Obese down vs Overweight	5.81	0.21	6.04	0.09
<i>MMP21</i>	matrix metalloproteinase 21	-1.24	0.047	Obese down vs Overweight	4.96	0.21	5.20	0.11
<i>CSTB</i>	cystatin B (stefin B)	-1.25	0.041	Obese down vs Overweight	9.75	0.23	9.91	0.09
<i>LRRFIP2</i>	leucine rich repeat (in FLII) interacting protein 2	-1.25	0.039	Obese down vs Overweight	6.72	0.20	6.94	0.22
<i>AP3M1</i>	adaptor-related protein complex 3, mu 1 subunit	-1.25	0.008	Obese down vs Overweight	7.03	0.16	7.23	0.20
<i>SMARCA4</i>	SWI	-1.25	0.033	Obese down vs Overweight	6.12	0.24	6.26	0.02
<i>STPG1</i>	sperm-tail PG-rich repeat containing 1	-1.26	0.046	Obese down vs Overweight	4.50	0.25	4.76	0.16
<i>MLLT3</i>	myeloid	-1.26	0.016	Obese down vs Overweight	6.07	0.20	6.34	0.11
<i>CLOCK</i>	clock circadian regulator	-1.26	0.023	Obese down vs Overweight	6.95	0.20	7.16	0.17
<i>SOX4</i>	SRY box 4	-1.27	0.038	Obese down vs Overweight	7.31	0.20	7.53	0.37
<i>SYNCRIP</i>	synaptotagmin binding, cytoplasmic RNA interacting protein	-1.27	0.046	Obese down vs Overweight	8.20	0.25	8.37	0.07
<i>MZF1</i>	myeloid zinc finger 1	-1.27	0.018	Obese down vs Overweight	4.64	0.20	4.86	0.18
<i>IKBKAP</i>	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein	-1.27	0.048	Obese down vs Overweight	6.61	0.24	6.83	0.14
<i>ARF3</i>	ADP-ribosylation factor 3	-1.27	0.048	Obese down vs Overweight	6.60	0.25	6.81	0.13
<i>OR52H1</i>	olfactory receptor, family 52, subfamily H, member 1	-1.27	0.020	Obese down vs Overweight	2.64	0.20	2.93	0.10

<i>TANK</i>	TRAF family member-associated NFKB activator	-1.27	0.049	Obese down vs Overweight	5.80	0.22	6.04	0.35
<i>SOGA1</i>	suppressor of glucose, autophagy associated 1	-1.28	0.014	Obese down vs Overweight	5.92	0.22	6.08	0.12
<i>FERMT2</i>	fermitin family member 2	-1.28	0.045	Obese down vs Overweight	7.45	0.24	7.72	0.15
<i>PPFIBP2</i>	PTPRF interacting protein, binding protein 2 (liprin beta 2)	-1.28	0.039	Obese down vs Overweight	6.07	0.23	6.25	0.37
<i>CUEDC1</i>	CUE domain containing 1	-1.28	0.040	Obese down vs Overweight	4.70	0.24	4.86	0.35
<i>GAL3ST4</i>	galactose-3-O-sulfotransferase 4	-1.28	0.047	Obese down vs Overweight	5.09	0.28	5.25	0.17
<i>C1QTNF1</i>	C1q and tumor necrosis factor related protein 1	-1.28	0.043	Obese down vs Overweight	5.68	0.25	5.87	0.31
<i>CARS2</i>	cysteinyl-tRNA synthetase 2, mitochondrial (putative)	-1.28	0.024	Obese down vs Overweight	4.82	0.20	5.10	0.22
<i>DOT1L</i>	DOT1-like histone H3K79 methyltransferase	-1.29	0.038	Obese down vs Overweight	5.84	0.24	6.09	0.04
<i>UBAC1</i>	UBA domain containing 1	-1.29	0.040	Obese down vs Overweight	4.92	0.23	5.21	0.11
<i>SLC11A2</i>	solute carrier family 11 (proton-coupled divalent metal ion transporter), member 2	-1.29	0.018	Obese down vs Overweight	6.14	0.19	6.43	0.24
<i>SRRT</i>	serrate, RNA effector molecule	-1.29	0.049	Obese down vs Overweight	5.41	0.27	5.56	0.21
<i>ZBTB20-AS3</i>	ZBTB20 antisense RNA 3	-1.29	0.035	Obese down vs Overweight	3.29	0.24	3.56	0.05
<i>SNX30</i>	sorting nexin family member 30	-1.29	0.021	Obese down vs Overweight	6.28	0.20	6.59	0.26
<i>DYSF</i>	dysferlin	-1.29	0.049	Obese down vs Overweight	5.07	0.25	5.36	0.12
<i>VANGL1</i>	VANGL planar cell polarity protein 1	-1.29	0.013	Obese down vs Overweight	4.94	0.22	5.20	0.19
<i>KPNA3</i>	karyopherin alpha 3 (importin alpha 4)	-1.29	0.046	Obese down vs Overweight	6.82	0.27	7.03	0.07
<i>DLGAP4-AS1</i>	DLGAP4 antisense RNA 1	-1.29	0.026	Obese down vs Overweight	5.09	0.23	5.39	0.09
<i>EVC</i>	Ellis van Creveld protein	-1.30	0.007	Obese down vs Overweight	6.18	0.18	6.51	0.07
<i>AP4M1</i>	adaptor-related protein complex 4, mu 1 subunit	-1.30	0.027	Obese down vs Overweight	5.15	0.20	5.49	0.33
<i>TMEM67</i>	transmembrane protein 67	-1.30	0.037	Obese down vs Overweight	5.40	0.24	5.64	0.20
<i>TSPAN19</i>	tetraspanin 19	-1.30	0.019	Obese down vs Overweight	1.97	0.17	2.37	0.36
<i>FRMD6</i>	FERM domain containing 6	-1.30	0.045	Obese down vs Overweight	5.25	0.25	5.64	0.14
<i>CCDC130</i>	coiled-coil domain containing 130	-1.30	0.045	Obese down vs Overweight	6.05	0.28	6.26	0.28
<i>N4BP2</i>	NEDD4 binding protein 2	-1.30	0.035	Obese down vs Overweight	6.23	0.23	6.49	0.28
<i>IKZF2</i>	IKAROS family zinc finger 2	-1.30	0.029	Obese down vs Overweight	5.71	0.24	5.94	0.15
<i>TFCP2L1</i>	transcription factor CP2-like 1	-1.30	0.014	Obese down vs Overweight	4.42	0.20	4.75	0.08
<i>ABHD6</i>	abhydrolase domain containing 6	-1.30	0.024	Obese down vs Overweight	5.54	0.26	5.71	0.18
<i>HCG18</i>	HLA complex group 18 (non-protein coding)	-1.31	0.021	Obese down vs Overweight	4.45	0.23	4.72	0.09
<i>SGCB</i>	sarcoglycan beta	-1.31	0.048	Obese down vs Overweight	8.31	0.28	8.51	0.12
<i>DDX46</i>	DEAD (Asp-Glu-Ala-Asp) box polypeptide 46	-1.31	0.039	Obese down vs Overweight	6.88	0.25	7.10	0.29
<i>XPO5</i>	exportin 5	-1.31	0.017	Obese down vs Overweight	6.12	0.21	6.42	0.15
<i>TAF1</i>	TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 250kDa	-1.31	0.015	Obese down vs Overweight	4.81	0.22	5.10	0.27
<i>UBP1</i>	upstream binding protein 1 (LBP-1a)	-1.31	0.039	Obese down vs Overweight	5.85	0.26	6.11	0.18
<i>PCDH7</i>	protocadherin 7	-1.31	0.022	Obese down vs Overweight	3.78	0.24	4.20	0.08
<i>ERCC8</i>	excision repair cross-complementation group 8	-1.32	0.025	Obese down vs Overweight	4.56	0.25	4.82	0.14
<i>SH3PXD2B</i>	SH3 and PX domains 2B	-1.32	0.011	Obese down vs Overweight	6.55	0.22	6.80	0.20
<i>HECTD3</i>	HECT domain containing E3 ubiquitin protein ligase 3	-1.32	0.045	Obese down vs Overweight	5.43	0.29	5.66	0.19
<i>DENND4B</i>	DENN	-1.32	0.002	Obese down vs Overweight	5.64	0.17	5.96	0.12
<i>ZBTB12</i>	zinc finger and BTB domain containing 12	-1.32	0.045	Obese down vs Overweight	5.17	0.28	5.41	0.17
<i>KTN1</i>	kinectin 1 (kinesin receptor)	-1.32	0.049	Obese down vs Overweight	7.98	0.27	8.28	0.09
<i>VTI1A</i>	vesicle transport through interaction with t-SNAREs 1A	-1.32	0.016	Obese down vs Overweight	5.32	0.23	5.60	0.12

<i>SEPT8</i>	septin 8	-1.32	0.041	Obese down vs Overweight	6.07	0.30	6.18	0.36
<i>LCA7</i>	lecithin-cholesterol acyltransferase	-1.32	0.014	Obese down vs Overweight	5.19	0.21	5.53	0.17
<i>LINC01126</i>	long intergenic non-protein coding RNA 1126	-1.32	0.016	Obese down vs Overweight	4.47	0.21	4.83	0.21
<i>ZNF561-AS1</i>	ZNF561 antisense RNA 1 (head to head)	-1.32	0.022	Obese down vs Overweight	5.47	0.29	5.66	0.26
<i>GNL3L</i>	guanine nucleotide binding protein-like 3 (nucleolar)-like	-1.32	0.036	Obese down vs Overweight	5.77	0.26	6.01	0.25
<i>NEDD4L</i>	neural precursor cell expressed, developmentally down-regulated 4-like, E3 ubiquitin protein ligase	-1.32	0.020	Obese down vs Overweight	4.86	0.25	5.08	0.14
<i>PITPNB</i>	phosphatidylinositol transfer protein, beta	-1.33	0.049	Obese down vs Overweight	6.67	0.32	6.81	0.13
<i>PHLDB1</i>	pleckstrin homology-like domain, family B, member 1	-1.33	0.009	Obese down vs Overweight	5.36	0.26	5.51	0.23
<i>M6PR</i>	mannose-6-phosphate receptor (cation dependent)	-1.33	0.009	Obese down vs Overweight	6.35	0.24	6.55	0.18
<i>TAS2R13</i>	taste receptor, type 2, member 13	-1.33	0.012	Obese down vs Overweight	3.57	0.22	3.87	0.03
<i>FUT8</i>	fucosyltransferase 8 (alpha (1,6) fucosyltransferase)	-1.33	0.021	Obese down vs Overweight	5.93	0.26	6.16	0.20
<i>IQCG</i>	IQ motif containing G	-1.33	0.034	Obese down vs Overweight	5.37	0.27	5.63	0.15
<i>BCL9</i>	B-cell CLL	-1.33	0.048	Obese down vs Overweight	6.57	0.27	6.90	0.28
<i>PAXBP1-AS1</i>	PAXBP1 antisense RNA 1	-1.33	0.048	Obese down vs Overweight	4.83	0.25	5.18	0.39
<i>WDR1</i>	WD repeat domain 1	-1.33	0.023	Obese down vs Overweight	5.93	0.28	6.14	0.12
<i>CTNNB1</i>	catenin (cadherin-associated protein), beta 1	-1.33	0.030	Obese down vs Overweight	8.44	0.27	8.67	0.34
<i>SRR</i>	serine racemase	-1.33	0.008	Obese down vs Overweight	6.01	0.22	6.27	0.35
<i>PMF1</i>	polyamine-modulated factor 1	-1.33	0.037	Obese down vs Overweight	5.80	0.22	6.14	0.45
<i>ABCD3</i>	ATP binding cassette subfamily D member 3	-1.34	0.022	Obese down vs Overweight	6.49	0.24	6.76	0.28
<i>ZYX</i>	zyxin	-1.34	0.041	Obese down vs Overweight	6.29	0.30	6.51	0.26
<i>CD28</i>	CD28 molecule	-1.34	0.035	Obese down vs Overweight	4.39	0.28	4.69	0.18
<i>STEAP2</i>	STEAP family member 2, metalloreductase	-1.34	0.018	Obese down vs Overweight	6.85	0.33	6.92	0.15
<i>GON4L</i>	gon-4-like (C. elegans)	-1.34	0.041	Obese down vs Overweight	6.11	0.29	6.34	0.16
<i>SPDR</i>	scaffolding protein involved in DNA repair	-1.34	0.027	Obese down vs Overweight	6.30	0.25	6.60	0.34
<i>ZNF621</i>	zinc finger protein 621	-1.34	0.042	Obese down vs Overweight	5.94	0.29	6.19	0.10
<i>SMARCC1</i>	SWI	-1.34	0.023	Obese down vs Overweight	7.16	0.25	7.41	0.30
<i>DCTN1</i>	dynactin 1	-1.34	0.016	Obese down vs Overweight	6.01	0.24	6.31	0.14
<i>TBC1D14</i>	TBC1 domain family, member 14	-1.34	0.045	Obese down vs Overweight	6.16	0.28	6.43	0.31
<i>LINC01089</i>	long intergenic non-protein coding RNA 1089	-1.34	0.027	Obese down vs Overweight	5.24	0.29	5.41	0.22
<i>MAPRE1</i>	microtubule-associated protein, RP	-1.35	0.015	Obese down vs Overweight	7.45	0.25	7.72	0.07
<i>KDM2A</i>	lysine (K)-specific demethylase 2A	-1.35	0.006	Obese down vs Overweight	7.15	0.22	7.38	0.21
<i>MAST3</i>	microtubule associated serine	-1.35	0.025	Obese down vs Overweight	4.96	0.26	5.33	0.25
<i>ERCC4</i>	excision repair cross-complementation group 4	-1.35	0.038	Obese down vs Overweight	5.23	0.26	5.56	0.30
<i>ABHD12B</i>	abhydrolase domain containing 12B	-1.35	0.048	Obese down vs Overweight	5.16	0.27	5.52	0.38
<i>HELLS</i>	helicase, lymphoid-specific	-1.35	0.016	Obese down vs Overweight	4.06	0.25	4.41	0.08
<i>SYMPK</i>	sympkin	-1.35	0.003	Obese down vs Overweight	5.88	0.21	6.12	0.22
<i>NFATC4</i>	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4	-1.35	0.040	Obese down vs Overweight	5.62	0.34	5.76	0.27
<i>SLC30A7</i>	solute carrier family 30 (zinc transporter), member 7	-1.35	0.019	Obese down vs Overweight	7.10	0.30	7.23	0.27
<i>EIF4G1</i>	eukaryotic translation initiation factor 4 gamma, 1	-1.35	0.044	Obese down vs Overweight	6.06	0.33	6.22	0.12
<i>ABR</i>	active BCR-related	-1.35	0.024	Obese down vs Overweight	6.64	0.31	6.79	0.20
<i>TNPO1</i>	transportin 1	-1.35	0.041	Obese down vs Overweight	7.45	0.29	7.75	0.21
<i>SLC16A6</i>	solute carrier family 16, member 6	-1.35	0.034	Obese down vs Overweight	3.76	0.31	4.06	0.16
<i>MORC2</i>	MORC family CW-type zinc finger 2	-1.36	0.048	Obese down vs Overweight	6.16	0.31	6.39	0.22

<i>SMPD4</i>	sphingomyelin phosphodiesterase 4, neutral membrane (neutral sphingomyelinase-3)	-1.36	0.030	Obese down vs Overweight	5.30	0.28	5.87	0.16
<i>ZNF577</i>	zinc finger protein 577	-1.36	0.042	Obese down vs Overweight	5.73	0.27	6.11	0.37
<i>DST</i>	dystonin	-1.36	0.047	Obese down vs Overweight	9.25	0.33	9.46	0.13
<i>ATXN1</i>	ataxin 1	-1.36	0.049	Obese down vs Overweight	6.05	0.30	6.41	0.23
<i>SPDL1</i>	spindle apparatus coiled-coil protein 1	-1.36	0.020	Obese down vs Overweight	5.21	0.33	5.33	0.04
<i>TRIM27</i>	tripartite motif containing 27	-1.36	0.033	Obese down vs Overweight	5.89	0.28	6.22	0.15
<i>ZNF618</i>	zinc finger protein 618	-1.36	0.045	Obese down vs Overweight	4.96	0.29	5.28	0.28
<i>ZNF649-AS1</i>	ZNF649 antisense RNA 1	-1.37	0.046	Obese down vs Overweight	4.31	0.31	4.61	0.46
<i>EFR3A</i>	EFR3 homolog A	-1.37	0.043	Obese down vs Overweight	7.30	0.31	7.59	0.26
<i>ARAP3</i>	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 3	-1.37	0.015	Obese down vs Overweight	5.34	0.27	5.58	0.24
<i>TTC9C</i>	tetratricopeptide repeat domain 9C	-1.37	0.034	Obese down vs Overweight	5.96	0.32	6.14	0.24
<i>ZNF318</i>	zinc finger protein 318	-1.37	0.032	Obese down vs Overweight	6.52	0.30	6.74	0.33
<i>ELOVL5</i>	ELOVL fatty acid elongase 5	-1.37	0.030	Obese down vs Overweight	6.60	0.30	6.85	0.17
<i>BHLHA15</i>	basic helix-loop-helix family, member a15	-1.37	0.020	Obese down vs Overweight	4.80	0.25	5.29	0.25
<i>ADAR</i>	adenosine deaminase, RNA-specific	-1.37	0.046	Obese down vs Overweight	6.56	0.35	6.71	0.34
<i>CSNK1A1</i>	casein kinase 1, alpha 1	-1.37	0.049	Obese down vs Overweight	6.52	0.31	6.88	0.29
<i>HLCS</i>	holocarboxylase synthetase (biotin-(propionyl-CoA-carboxylase (ATP-hydrolysing)) ligase)	-1.37	0.010	Obese down vs Overweight	5.16	0.25	5.45	0.18
<i>ZNF544</i>	zinc finger protein 544	-1.38	0.028	Obese down vs Overweight	3.36	0.29	3.66	0.03
<i>SRGAP2</i>	SLIT-ROBO Rho GTPase activating protein 2	-1.38	0.047	Obese down vs Overweight	6.69	0.38	6.82	0.13
<i>PPP1R9B</i>	protein phosphatase 1, regulatory subunit 9B	-1.38	0.028	Obese down vs Overweight	5.46	0.30	5.73	0.13
<i>SMG6</i>	SMG6 nonsense mediated mRNA decay factor	-1.38	0.041	Obese down vs Overweight	5.90	0.30	6.21	0.24
<i>GNG2</i>	guanine nucleotide binding protein (G protein), gamma 2	-1.38	0.019	Obese down vs Overweight	4.62	0.32	4.77	0.14
<i>TYW5</i>	tRNA-yW synthesizing protein 5	-1.38	0.029	Obese down vs Overweight	5.91	0.26	6.32	0.27
<i>PSME3</i>	proteasome activator subunit 3	-1.38	0.036	Obese down vs Overweight	6.06	0.31	6.40	0.07
<i>LRRC1</i>	leucine rich repeat containing 1	-1.39	0.012	Obese down vs Overweight	5.64	0.28	5.93	0.15
<i>RALGAPB</i>	Ral GTPase activating protein, beta subunit (non-catalytic)	-1.39	0.017	Obese down vs Overweight	6.70	0.26	6.99	0.36
<i>GSPT1</i>	G1 to S phase transition 1	-1.39	0.022	Obese down vs Overweight	6.26	0.34	6.41	0.07
<i>DUSP18</i>	dual specificity phosphatase 18	-1.39	0.015	Obese down vs Overweight	5.87	0.27	6.12	0.26
<i>RAB40A</i>	RAB40A, member RAS oncogene family	-1.39	0.017	Obese down vs Overweight	4.17	0.26	4.49	0.22
<i>PTPN9</i>	protein tyrosine phosphatase, non-receptor type 9	-1.39	0.050	Obese down vs Overweight	5.92	0.32	6.37	0.24
<i>OTUD6B</i>	OTU domain containing 6B	-1.39	0.012	Obese down vs Overweight	6.33	0.29	6.54	0.20
<i>EIF4G2</i>	eukaryotic translation initiation factor 4 gamma, 2	-1.39	0.020	Obese down vs Overweight	9.42	0.31	9.63	0.16
<i>PRELID3A</i>	PRELI domain containing 3A	-1.39	0.034	Obese down vs Overweight	4.67	0.31	5.05	0.23
<i>RAB42</i>	RAB42, member RAS oncogene family	-1.39	0.024	Obese down vs Overweight	4.22	0.25	4.69	0.33
<i>PLCB3</i>	phospholipase C, beta 3 (phosphatidylinositol-specific)	-1.39	0.005	Obese down vs Overweight	5.53	0.26	5.80	0.17
<i>SNX18</i>	sorting nexin 18	-1.39	0.045	Obese down vs Overweight	5.89	0.33	6.17	0.18
<i>HEATR3</i>	HEAT repeat containing 3	-1.39	0.010	Obese down vs Overweight	6.54	0.30	6.68	0.33
<i>ACTB</i>	actin, beta	-1.39	0.007	Obese down vs Overweight	6.25	0.32	6.38	0.14
<i>TET2</i>	tet methylcytosine dioxygenase 2	-1.39	0.041	Obese down vs Overweight	6.57	0.27	6.94	0.51
<i>CCM2</i>	cerebral cavernous malformation 2	-1.39	0.007	Obese down vs Overweight	5.02	0.26	5.32	0.08
<i>SGMS2</i>	sphingomyelin synthase 2	-1.40	0.013	Obese down vs Overweight	6.21	0.27	6.53	0.09

<i>PHF10</i>	PHD finger protein 10	-1.40	0.039	Obese down vs Overweight	7.74	0.37	7.90	0.17
<i>ELOVL1</i>	ELOVL fatty acid elongase 1	-1.40	0.024	Obese down vs Overweight	6.63	0.32	6.81	0.34
<i>ZNF749</i>	zinc finger protein 749	-1.40	0.018	Obese down vs Overweight	3.69	0.27	4.04	0.15
<i>ENTPD4</i>	ectonucleoside triphosphate diphosphohydrolase 4	-1.40	0.013	Obese down vs Overweight	6.70	0.26	7.01	0.24
<i>GNRH1</i>	gonadotropin releasing hormone 1	-1.40	0.047	Obese down vs Overweight	5.17	0.32	5.51	0.31
<i>RP2</i>	retinitis pigmentosa 2 (X-linked recessive)	-1.40	0.038	Obese down vs Overweight	5.39	0.39	5.57	0.11
<i>TIMM22</i>	translocase of inner mitochondrial membrane 22 homolog (yeast)	-1.40	0.049	Obese down vs Overweight	6.06	0.33	6.49	0.14
<i>KALRN</i>	kalirin, RhoGEF kinase	-1.40	0.002	Obese down vs Overweight	5.19	0.19	5.62	0.12
<i>ZNF397</i>	zinc finger protein 397	-1.40	0.034	Obese down vs Overweight	6.15	0.29	6.48	0.43
<i>SLC25A24</i>	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	-1.41	0.033	Obese down vs Overweight	6.32	0.32	6.60	0.26
<i>RBBP5</i>	retinoblastoma binding protein 5	-1.41	0.031	Obese down vs Overweight	5.82	0.33	6.09	0.12
<i>PLEKHB2</i>	pleckstrin homology domain containing, family B (evectins) member 2	-1.41	0.048	Obese down vs Overweight	5.86	0.34	6.18	0.24
<i>FKBP1C</i>	FK506 binding protein 1C	-1.41	0.009	Obese down vs Overweight	3.16	0.21	3.60	0.49
<i>MIPEP</i>	mitochondrial intermediate peptidase	-1.41	0.044	Obese down vs Overweight	5.37	0.33	5.73	0.21
<i>GJB4</i>	gap junction protein beta 4	-1.41	0.033	Obese down vs Overweight	3.80	0.32	4.12	0.27
<i>VPS53</i>	vacuolar protein sorting 53 homolog (<i>S. cerevisiae</i>)	-1.41	0.018	Obese down vs Overweight	7.28	0.31	7.54	0.25
<i>OGDH</i>	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	-1.42	0.010	Obese down vs Overweight	6.82	0.28	7.05	0.33
<i>CRYBB2</i>	crystallin beta B2	-1.42	0.032	Obese down vs Overweight	2.52	0.29	2.97	0.41
<i>DSEL</i>	dermatan sulfate epimerase-like	-1.42	0.036	Obese down vs Overweight	6.84	0.40	6.97	0.13
<i>PSD3</i>	pleckstrin and Sec7 domain containing 3	-1.42	0.020	Obese down vs Overweight	8.06	0.30	8.36	0.20
<i>CTNND1</i>	catenin (cadherin-associated protein), delta 1	-1.42	0.046	Obese down vs Overweight	7.00	0.36	7.29	0.24
<i>NOP16</i>	NOP16 nucleolar protein	-1.42	0.047	Obese down vs Overweight	5.62	0.35	5.99	0.02
<i>PTBP3</i>	polypyrimidine tract binding protein 3	-1.42	0.015	Obese down vs Overweight	8.26	0.28	8.64	0.14
<i>PBX3</i>	pre-B-cell leukemia homeobox 3	-1.42	0.044	Obese down vs Overweight	5.38	0.34	5.64	0.47
<i>HIST2H2BF</i>	histone cluster 2, H2bf	-1.42	0.003	Obese down vs Overweight	4.05	0.25	4.37	0.03
<i>AAK1</i>	AP2 associated kinase 1	-1.42	0.043	Obese down vs Overweight	5.71	0.35	6.03	0.30
<i>ARPC2</i>	actin related protein 2	-1.43	0.046	Obese down vs Overweight	7.47	0.34	7.83	0.27
<i>RNF20</i>	ring finger protein 20, E3 ubiquitin protein ligase	-1.43	0.029	Obese down vs Overweight	6.87	0.33	7.15	0.26
<i>BRD7</i>	bromodomain containing 7	-1.43	0.010	Obese down vs Overweight	7.32	0.29	7.60	0.24
<i>KIAA1033</i>	KIAA1033	-1.43	0.014	Obese down vs Overweight	7.56	0.27	7.89	0.39
<i>ITGAV</i>	integrin alpha V	-1.43	0.013	Obese down vs Overweight	8.53	0.30	8.82	0.16
<i>TRAJ37</i>	T cell receptor alpha joining 37	-1.43	0.039	Obese down vs Overweight	5.07	0.29	5.59	0.52
<i>PPFIA1</i>	protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 1	-1.43	0.008	Obese down vs Overweight	6.47	0.26	6.80	0.26
<i>PDE8A</i>	phosphodiesterase 8A	-1.43	0.013	Obese down vs Overweight	6.38	0.28	6.66	0.36
<i>LOXL1</i>	lysyl oxidase-like 1	-1.43	0.035	Obese down vs Overweight	6.24	0.33	6.56	0.25
<i>ZNF512</i>	zinc finger protein 512	-1.43	0.029	Obese down vs Overweight	5.82	0.35	6.12	0.11
<i>PGS1</i>	phosphatidylglycerophosphate synthase 1	-1.44	0.040	Obese down vs Overweight	5.29	0.35	5.59	0.28
<i>LMNA</i>	lamin A	-1.44	0.029	Obese down vs Overweight	6.05	0.35	6.30	0.27
<i>COMMD7</i>	COMM domain containing 7	-1.44	0.045	Obese down vs Overweight	6.74	0.37	7.07	0.07
<i>THAP9-AS1</i>	THAP9 antisense RNA 1	-1.44	0.039	Obese down vs Overweight	5.13	0.34	5.47	0.32

<i>KRBA2</i>	KRAB-A domain containing 2	-1.44	0.042	Obese down vs Overweight	4.89	0.34	5.28	0.28
<i>GPATCH2</i>	G-patch domain containing 2	-1.44	0.018	Obese down vs Overweight	5.36	0.33	5.69	0.11
<i>TAF10</i>	TAF10 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 30kDa	-1.44	0.003	Obese down vs Overweight	7.09	0.26	7.39	0.19
<i>IFNAR2</i>	interferon (alpha, beta and omega) receptor 2	-1.44	0.017	Obese down vs Overweight	5.24	0.33	5.56	0.01
<i>MFAP3</i>	microfibrillar associated protein 3	-1.44	0.034	Obese down vs Overweight	5.20	0.35	5.61	0.18
<i>CMIP</i>	c-Maf inducing protein	-1.44	0.038	Obese down vs Overweight	5.61	0.39	5.81	0.33
<i>RCC2</i>	regulator of chromosome condensation 2	-1.45	0.008	Obese down vs Overweight	6.90	0.28	7.26	0.12
<i>MIB1</i>	mindbomb E3 ubiquitin protein ligase 1	-1.45	0.013	Obese down vs Overweight	7.22	0.31	7.56	0.06
<i>PIIP5K1</i>	diphosphoinositol pentakisphosphate kinase 1	-1.45	0.019	Obese down vs Overweight	4.72	0.30	5.24	0.20
<i>ATP2A2</i>	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	-1.45	0.042	Obese down vs Overweight	7.48	0.37	7.79	0.16
<i>TNFAIP1</i>	tumor necrosis factor, alpha-induced protein 1 (endothelial)	-1.45	0.035	Obese down vs Overweight	6.47	0.34	6.82	0.36
<i>CRYBG3</i>	crystallin beta-gamma domain containing 3	-1.45	0.048	Obese down vs Overweight	6.25	0.39	6.51	0.33
<i>IPO7</i>	importin 7	-1.45	0.039	Obese down vs Overweight	7.79	0.39	8.04	0.13
<i>YWHAG</i>	tyrosine 3-monooxygenase	-1.46	0.029	Obese down vs Overweight	7.71	0.38	7.95	0.09
<i>PKI55</i>	DKFZp434H1419	-1.46	0.030	Obese down vs Overweight	6.17	0.39	6.37	0.10
<i>OCRL</i>	oculocerebrorenal syndrome of Lowe	-1.46	0.022	Obese down vs Overweight	5.77	0.32	6.18	0.15
<i>DVL3</i>	dishevelled segment polarity protein 3	-1.46	0.029	Obese down vs Overweight	5.62	0.37	5.86	0.31
<i>PDCD11</i>	programmed cell death 11	-1.46	0.010	Obese down vs Overweight	6.08	0.30	6.39	0.26
<i>DENND5A</i>	DENN	-1.46	0.039	Obese down vs Overweight	6.60	0.38	6.95	0.12
<i>ZNF131</i>	zinc finger protein 131	-1.46	0.028	Obese down vs Overweight	5.85	0.33	6.26	0.18
<i>STAB1</i>	stabilin 1	-1.47	0.043	Obese down vs Overweight	5.60	0.36	5.96	0.45
<i>TRGV8</i>	T cell receptor gamma variable 8	-1.47	0.030	Obese down vs Overweight	4.63	0.34	5.27	0.32
<i>MIR558</i>	microRNA 558	-1.47	0.017	Obese down vs Overweight	5.20	0.38	5.51	0.25
<i>ERC1</i>	ELKS	-1.47	0.023	Obese down vs Overweight	7.44	0.35	7.73	0.23
<i>CALM1</i>	calmodulin 1 (phosphorylase kinase, delta)	-1.47	0.007	Obese down vs Overweight	5.35	0.26	5.80	0.20
<i>KIAA0100</i>	KIAA0100	-1.47	0.027	Obese down vs Overweight	7.14	0.37	7.41	0.25
<i>PALLD</i>	palladin, cytoskeletal associated protein	-1.47	0.046	Obese down vs Overweight	6.02	0.40	6.34	0.14
<i>ADAMTS2</i>	ADAM metalloproteinase with thrombospondin type 1 motif 2	-1.48	0.039	Obese down vs Overweight	6.72	0.37	7.05	0.39
<i>ACIN1</i>	apoptotic chromatin condensation inducer 1	-1.48	0.018	Obese down vs Overweight	6.56	0.35	6.85	0.26
<i>NLN</i>	neurolysin (metalloproteinase M3 family)	-1.48	0.004	Obese down vs Overweight	5.10	0.25	5.52	0.29
<i>BTBD7</i>	BTB (POZ) domain containing 7	-1.48	0.048	Obese down vs Overweight	5.67	0.39	5.99	0.42
<i>ZNF101</i>	zinc finger protein 101	-1.49	0.033	Obese down vs Overweight	5.16	0.37	5.54	0.15
<i>ASB7</i>	ankyrin repeat and SOCS box containing 7	-1.49	0.001	Obese down vs Overweight	5.82	0.25	6.19	0.12
<i>RFX8</i>	RFX family member 8, lacking RFX DNA binding domain	-1.49	0.007	Obese down vs Overweight	4.51	0.24	4.98	0.48
<i>LARS2-AS1</i>	LARS2 antisense RNA 1	-1.49	0.003	Obese down vs Overweight	4.40	0.28	4.76	0.20
<i>PPP1R3B</i>	protein phosphatase 1, regulatory subunit 3B	-1.49	0.022	Obese down vs Overweight	5.41	0.35	5.80	0.17
<i>WDR82</i>	WD repeat domain 82	-1.50	0.005	Obese down vs Overweight	6.82	0.29	7.14	0.31
<i>ABCC3</i>	ATP binding cassette subfamily C member 3	-1.50	0.015	Obese down vs Overweight	4.95	0.32	5.36	0.57
<i>ACTR3</i>	ARP3 actin-related protein 3 homolog (yeast)	-1.50	0.022	Obese down vs Overweight	7.72	0.37	8.02	0.25
<i>DCDC2B</i>	doublecortin domain containing 2B	-1.50	0.009	Obese down vs Overweight	5.14	0.29	5.59	0.14
<i>ATXN2L</i>	ataxin 2-like	-1.50	0.029	Obese down vs Overweight	6.66	0.37	7.02	0.35

<i>RHBDL2</i>	rhomboid, veinlet-like 2 (Drosophila)	-1.50	0.030	Obese down vs Overweight	5.22	0.35	5.61	0.54
<i>SPRED1</i>	sprouty-related, EVH1 domain containing 1	-1.50	0.019	Obese down vs Overweight	7.84	0.33	8.23	0.39
<i>RASA4B</i>	RAS p21 protein activator 4B	-1.50	0.025	Obese down vs Overweight	5.84	0.38	6.13	0.34
<i>CSGALNACT2</i>	chondroitin sulfate N-acetylgalactosaminyltransferase 2	-1.51	0.031	Obese down vs Overweight	7.57	0.41	7.86	0.07
<i>TWF1</i>	twinfilin actin binding protein 1	-1.51	0.021	Obese down vs Overweight	6.84	0.38	7.12	0.27
<i>SNRPN</i>	small nuclear ribonucleoprotein polypeptide N	-1.51	0.046	Obese down vs Overweight	4.54	0.35	4.94	0.68
<i>EHD4</i>	EH domain containing 4	-1.51	0.031	Obese down vs Overweight	5.90	0.40	6.19	0.25
<i>MYO1E</i>	myosin IE	-1.51	0.029	Obese down vs Overweight	6.68	0.32	7.12	0.54
<i>MIR181A1HG</i>	MIR181A1 host gene	-1.51	0.039	Obese down vs Overweight	4.99	0.39	5.42	0.27
<i>SMC1A</i>	structural maintenance of chromosomes 1A	-1.51	0.035	Obese down vs Overweight	6.55	0.38	6.98	0.32
<i>SNORA80A</i>	small nucleolar RNA, H	-1.51	0.047	Obese down vs Overweight	5.52	0.46	5.68	0.49
<i>RABL2B</i>	RAB, member of RAS oncogene family-like 2B	-1.52	0.011	Obese down vs Overweight	4.93	0.31	5.37	0.27
<i>AP2B1</i>	adaptor-related protein complex 2, beta 1 subunit	-1.52	0.042	Obese down vs Overweight	8.13	0.44	8.42	0.22
<i>TRAK1</i>	trafficking protein, kinesin binding 1	-1.52	0.049	Obese down vs Overweight	5.55	0.39	5.98	0.43
<i>SMAGP</i>	small cell adhesion glycoprotein	-1.52	0.037	Obese down vs Overweight	5.49	0.36	5.97	0.46
<i>PLXNA2</i>	plexin A2	-1.52	0.042	Obese down vs Overweight	5.83	0.39	6.33	0.20
<i>PGAM1</i>	phosphoglycerate mutase 1 (brain)	-1.53	0.023	Obese down vs Overweight	4.73	0.38	5.12	0.13
<i>ZYG11B</i>	zyg-11 family member B, cell cycle regulator	-1.53	0.048	Obese down vs Overweight	6.82	0.41	7.22	0.37
<i>METTL6</i>	methyltransferase like 6	-1.53	0.047	Obese down vs Overweight	5.90	0.43	6.26	0.20
<i>LILRB1</i>	leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	-1.53	0.047	Obese down vs Overweight	3.22	0.39	3.94	0.44
<i>TULP4</i>	tubby like protein 4	-1.53	0.016	Obese down vs Overweight	6.79	0.40	7.05	0.18
<i>SLC6A6</i>	solute carrier family 6 (neurotransmitter transporter), member 6	-1.53	0.042	Obese down vs Overweight	6.20	0.38	6.72	0.39
<i>SNORA37</i>	small nucleolar RNA, H	-1.54	0.048	Obese down vs Overweight	4.23	0.42	4.61	0.46
<i>CPSF2</i>	cleavage and polyadenylation specific factor 2	-1.54	0.005	Obese down vs Overweight	6.16	0.30	6.58	0.18
<i>PCDH12</i>	protocadherin 12	-1.54	0.007	Obese down vs Overweight	5.09	0.33	5.46	0.24
<i>HSPA8</i>	heat shock 70kDa protein 8	-1.54	0.015	Obese down vs Overweight	9.32	0.39	9.61	0.33
<i>LINC00997</i>	long intergenic non-protein coding RNA 997	-1.54	0.047	Obese down vs Overweight	5.33	0.40	5.80	0.48
<i>SNORA3B</i>	small nucleolar RNA, H	-1.55	0.034	Obese down vs Overweight	6.15	0.42	6.53	0.13
<i>EML4</i>	echinoderm microtubule associated protein like 4	-1.55	0.013	Obese down vs Overweight	6.06	0.29	6.53	0.61
<i>PRR14L</i>	proline rich 14-like	-1.55	0.026	Obese down vs Overweight	5.40	0.36	5.87	0.41
<i>LINC00266-3</i>	long intergenic non-protein coding RNA 266-3	-1.55	0.038	Obese down vs Overweight	2.10	0.35	2.70	0.57
<i>SNORD12</i>	small nucleolar RNA, C	-1.56	0.016	Obese down vs Overweight	2.85	0.34	3.44	0.15
<i>SLC9B1</i>	solute carrier family 9, subfamily B (NHA1, cation proton antiporter 1), member 1	-1.56	0.001	Obese down vs Overweight	3.07	0.22	3.68	0.30
<i>NOTCH2</i>	notch 2	-1.56	0.031	Obese down vs Overweight	7.88	0.42	8.24	0.29
<i>CTSB</i>	cathepsin B	-1.56	0.016	Obese down vs Overweight	6.33	0.37	6.76	0.22
<i>RAPGEF4</i>	Rap guanine nucleotide exchange factor 4	-1.57	0.040	Obese down vs Overweight	5.39	0.41	5.86	0.42
<i>HOXC8</i>	homeobox C8	-1.57	0.005	Obese down vs Overweight	4.81	0.29	5.34	0.21
<i>TTC7B</i>	tetratricopeptide repeat domain 7B	-1.57	0.030	Obese down vs Overweight	5.02	0.41	5.45	0.25
<i>TTC8</i>	tetratricopeptide repeat domain 8	-1.57	0.009	Obese down vs Overweight	5.10	0.35	5.52	0.11
<i>SNORD124</i>	small nucleolar RNA, C	-1.57	0.005	Obese down vs Overweight	4.27	0.34	4.68	0.30
<i>DNASE1L3</i>	deoxyribonuclease I-like 3	-1.57	0.004	Obese down vs Overweight	4.76	0.23	5.30	0.58
<i>DLGAP4</i>	discs, large (Drosophila) homolog-associated protein 4	-1.58	0.012	Obese down vs Overweight	6.98	0.37	7.42	0.23

<i>FLII</i>	flightless I actin binding protein	-1.58	0.024	Obese down vs Overweight	6.83	0.46	7.09	0.17
<i>RPS6KA3</i>	ribosomal protein S6 kinase, 90kDa, polypeptide 3	-1.58	0.035	Obese down vs Overweight	6.71	0.42	7.13	0.38
<i>IPO9-AS1</i>	IPO9 antisense RNA 1	-1.58	0.002	Obese down vs Overweight	6.76	0.30	7.20	0.12
<i>ZNF84</i>	zinc finger protein 84	-1.58	0.020	Obese down vs Overweight	4.66	0.38	5.09	0.36
<i>TAS2R4</i>	taste receptor, type 2, member 4	-1.58	0.012	Obese down vs Overweight	5.09	0.35	5.53	0.36
<i>PHACTR2-AS1</i>	PHACTR2 antisense RNA 1	-1.59	0.021	Obese down vs Overweight	4.07	0.37	4.63	0.30
<i>RAPH1</i>	Ras association (RalGDS	-1.59	0.024	Obese down vs Overweight	8.21	0.42	8.59	0.24
<i>SH3KBP1</i>	SH3-domain kinase binding protein 1	-1.59	0.016	Obese down vs Overweight	6.23	0.41	6.59	0.09
<i>CEMIP</i>	cell migration inducing protein, hyaluronan binding	-1.59	0.018	Obese down vs Overweight	5.49	0.41	5.91	0.09
<i>BAG2</i>	BCL2-associated athanogene 2	-1.59	0.011	Obese down vs Overweight	5.73	0.38	6.09	0.25
<i>DYNC1LI2</i>	dynein, cytoplasmic 1, light intermediate chain 2	-1.59	0.045	Obese down vs Overweight	6.85	0.47	7.28	0.32
<i>ARPC5</i>	actin related protein 2	-1.59	0.016	Obese down vs Overweight	8.14	0.41	8.47	0.37
<i>ADAMTS9</i>	ADAM metalloproteinase with thrombospondin type 1 motif 9	-1.60	0.042	Obese down vs Overweight	5.11	0.32	5.59	1.01
<i>PEA15</i>	phosphoprotein enriched in astrocytes 15	-1.60	0.039	Obese down vs Overweight	6.91	0.44	7.42	0.18
<i>TAS2R50</i>	taste receptor, type 2, member 50	-1.60	0.021	Obese down vs Overweight	2.75	0.43	3.16	0.53
<i>ZBED6</i>	zinc finger, BED-type containing 6	-1.60	0.044	Obese down vs Overweight	7.70	0.52	7.94	0.26
<i>RAI14</i>	retinoic acid induced 14	-1.60	0.009	Obese down vs Overweight	6.08	0.40	6.40	0.12
<i>GBP3</i>	guanylate binding protein 3	-1.60	0.029	Obese down vs Overweight	2.15	0.44	2.53	0.50
<i>ANKRD10</i>	ankyrin repeat domain 10	-1.60	0.043	Obese down vs Overweight	6.85	0.43	7.31	0.58
<i>PFN1</i>	profilin 1	-1.61	0.010	Obese down vs Overweight	7.84	0.40	8.18	0.07
<i>TRAK2</i>	trafficking protein, kinesin binding 2	-1.61	0.024	Obese down vs Overweight	7.30	0.48	7.54	0.35
<i>PAG1</i>	phosphoprotein membrane anchor with glycosphingolipid microdomains 1	-1.61	0.049	Obese down vs Overweight	4.65	0.46	5.26	0.12
<i>ABRACL</i>	ABRA C-terminal like	-1.61	0.018	Obese down vs Overweight	5.26	0.47	5.55	0.07
<i>MACF1</i>	microtubule-actin crosslinking factor 1	-1.62	0.040	Obese down vs Overweight	7.54	0.45	7.93	0.53
<i>TFEC</i>	transcription factor EC	-1.62	0.016	Obese down vs Overweight	3.38	0.36	3.95	0.43
<i>ICMT</i>	isoprenylcysteine carboxyl methyltransferase	-1.62	0.026	Obese down vs Overweight	5.31	0.42	5.81	0.29
<i>HELZ</i>	helicase with zinc finger	-1.62	0.047	Obese down vs Overweight	7.20	0.48	7.60	0.45
<i>SPDYE18</i>	speedy	-1.62	0.036	Obese down vs Overweight	5.43	0.45	5.96	0.06
<i>NAV1</i>	neuron navigator 1	-1.63	0.009	Obese down vs Overweight	6.74	0.38	7.18	0.14
<i>PTPN21</i>	protein tyrosine phosphatase, non-receptor type 21	-1.63	0.027	Obese down vs Overweight	5.90	0.45	6.32	0.29
<i>IGHV1OR21-1</i>	immunoglobulin heavy variable 1	-1.63	0.031	Obese down vs Overweight	5.09	0.43	5.77	0.24
<i>MIR1290</i>	microRNA 1290	-1.63	0.048	Obese down vs Overweight	5.27	0.42	5.78	0.81
<i>CAMKK2</i>	calcium	-1.64	0.022	Obese down vs Overweight	5.88	0.42	6.31	0.41
<i>TRIM44</i>	tripartite motif containing 44	-1.64	0.017	Obese down vs Overweight	6.75	0.44	7.06	0.49
<i>HMOX1</i>	heme oxygenase 1	-1.66	0.038	Obese down vs Overweight	6.32	0.49	6.77	0.24
<i>FMO3</i>	flavin containing monooxygenase 3	-1.66	0.023	Obese down vs Overweight	3.92	0.38	4.43	0.70
<i>NBPF11</i>	neuroblastoma breakpoint family, member 11	-1.66	0.048	Obese down vs Overweight	8.61	0.50	9.02	0.56
<i>SLC44A5</i>	solute carrier family 44, member 5	-1.66	0.004	Obese down vs Overweight	4.91	0.25	5.54	0.66
<i>CRYBA1</i>	crystallin beta A1	-1.66	0.022	Obese down vs Overweight	3.94	0.40	4.45	0.52
<i>ATP6V0D1</i>	ATPase, H+ transporting, lysosomal 38kDa, V0 subunit d1	-1.67	0.032	Obese down vs Overweight	6.27	0.53	6.59	0.17
<i>HEY2</i>	hes-related family bHLH transcription factor with YRPW motif 2	-1.67	0.028	Obese down vs Overweight	5.81	0.42	6.46	0.47

<i>CAP1</i>	CAP, adenylate cyclase-associated protein 1 (yeast)	-1.67	0.033	Obese down vs Overweight	8.17	0.49	8.61	0.28
<i>ENPEP</i>	glutamyl aminopeptidase (aminopeptidase A)	-1.67	0.036	Obese down vs Overweight	4.82	0.43	5.33	0.71
<i>H2AFV</i>	H2A histone family, member V	-1.67	0.021	Obese down vs Overweight	5.93	0.44	6.38	0.44
<i>ZFP28</i>	ZFP28 zinc finger protein	-1.68	0.014	Obese down vs Overweight	4.40	0.41	4.98	0.11
<i>CREB1</i>	cAMP responsive element binding protein 1	-1.68	0.043	Obese down vs Overweight	6.04	0.48	6.56	0.51
<i>NPIPA1</i>	nuclear pore complex interacting protein family, member A1	-1.68	0.040	Obese down vs Overweight	7.30	0.49	7.86	0.33
<i>MYO6</i>	myosin VI	-1.69	0.022	Obese down vs Overweight	6.77	0.42	7.30	0.50
<i>MMP14</i>	matrix metalloproteinase 14 (membrane-inserted)	-1.70	0.023	Obese down vs Overweight	6.50	0.49	6.90	0.22
<i>ITPR3</i>	inositol 1,4,5-trisphosphate receptor, type 3	-1.70	0.017	Obese down vs Overweight	6.00	0.44	6.47	0.33
<i>ADGRE2</i>	adhesion G protein-coupled receptor E2	-1.70	0.019	Obese down vs Overweight	5.49	0.43	6.17	0.18
<i>CYTH3</i>	cytohesin 3	-1.70	0.046	Obese down vs Overweight	3.98	0.54	4.47	0.29
<i>CPNE2</i>	copine II	-1.70	0.018	Obese down vs Overweight	6.86	0.49	7.22	0.25
<i>MYO1B</i>	myosin IB	-1.70	0.023	Obese down vs Overweight	7.64	0.46	8.13	0.30
<i>GZMA</i>	granzyme A	-1.71	0.026	Obese down vs Overweight	4.59	0.42	5.14	0.72
<i>ILK</i>	integrin linked kinase	-1.73	0.010	Obese down vs Overweight	7.97	0.47	8.34	0.19
<i>MIR4540</i>	microRNA 4540	-1.73	0.033	Obese down vs Overweight	3.85	0.49	4.43	0.34
<i>PCDH17</i>	protocadherin 17	-1.74	0.018	Obese down vs Overweight	5.04	0.42	5.74	0.42
<i>ACTN4</i>	actinin, alpha 4	-1.74	0.047	Obese down vs Overweight	7.36	0.55	7.90	0.42
<i>BEND6</i>	BEN domain containing 6	-1.77	0.033	Obese down vs Overweight	5.27	0.57	5.66	0.32
<i>ENG</i>	endoglin	-1.77	0.045	Obese down vs Overweight	6.69	0.61	7.07	0.55
<i>MSN</i>	moesin	-1.78	0.045	Obese down vs Overweight	8.67	0.62	9.05	0.24
<i>ABHD2</i>	abhydrolase domain containing 2	-1.78	0.019	Obese down vs Overweight	7.16	0.48	7.67	0.46
<i>CTSK</i>	cathepsin K	-1.79	0.042	Obese down vs Overweight	8.60	0.56	9.07	0.55
<i>GTDC1</i>	glycosyltransferase like domain containing 1	-1.79	0.006	Obese down vs Overweight	5.07	0.44	5.53	0.27
<i>TRIM48</i>	tripartite motif containing 48	-1.79	0.038	Obese down vs Overweight	3.20	0.58	3.79	0.25
<i>HUNK</i>	hormonally up-regulated Neu-associated kinase	-1.82	0.029	Obese down vs Overweight	4.74	0.55	5.26	0.34
<i>MIR548L</i>	microRNA 548l	-1.82	0.049	Obese down vs Overweight	3.34	0.66	3.77	0.57
<i>ZNF732</i>	zinc finger protein 732	-1.83	0.030	Obese down vs Overweight	4.83	0.53	5.53	0.21
<i>TPM4</i>	tropomyosin 4	-1.83	0.011	Obese down vs Overweight	9.10	0.47	9.68	0.17
<i>ANTXR1</i>	anthrax toxin receptor 1	-1.84	0.043	Obese down vs Overweight	7.66	0.63	8.12	0.32
<i>MYH9</i>	myosin, heavy chain 9, non-muscle	-1.85	0.037	Obese down vs Overweight	6.75	0.63	7.16	0.37
<i>LINC01296</i>	long intergenic non-protein coding RNA 1296	-1.85	0.036	Obese down vs Overweight	3.99	0.59	4.51	0.43
<i>COL6A3</i>	collagen, type VI, alpha 3	-1.85	0.039	Obese down vs Overweight	9.26	0.63	9.66	0.46
<i>RNF213</i>	ring finger protein 213	-1.86	0.041	Obese down vs Overweight	6.34	0.60	6.87	0.58
<i>SULF1</i>	sulfatase 1	-1.87	0.017	Obese down vs Overweight	7.76	0.56	8.22	0.20
<i>CLEC4A</i>	C-type lectin domain family 4, member A	-1.88	0.039	Obese down vs Overweight	4.50	0.61	5.10	0.24
<i>NBPF20</i>	neuroblastoma breakpoint family, member 20	-1.88	0.015	Obese down vs Overweight	9.65	0.55	10.12	0.50
<i>ESM1</i>	endothelial cell-specific molecule 1	-1.89	0.004	Obese down vs Overweight	4.42	0.40	5.13	0.44
<i>LINC00472</i>	long intergenic non-protein coding RNA 472	-1.89	0.018	Obese down vs Overweight	3.75	0.50	4.46	0.48
<i>NBPF14</i>	neuroblastoma breakpoint family, member 14	-1.91	0.018	Obese down vs Overweight	8.10	0.55	8.60	0.60
<i>NOTCH2NL</i>	notch 2 N-terminal like	-1.91	0.043	Obese down vs Overweight	9.10	0.63	9.61	0.63
<i>FLNA</i>	filamin A, alpha	-1.91	0.036	Obese down vs Overweight	6.34	0.64	6.86	0.38
<i>APOBEC3C</i>	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3C	-1.91	0.008	Obese down vs Overweight	5.61	0.49	6.21	0.52

<i>FMNL3</i>	formin like 3	-1.92	0.016	Obese down vs Overweight	5.64	0.53	6.36	0.55
<i>CCR1</i>	chemokine (C-C motif) receptor 1	-1.92	0.031	Obese down vs Overweight	4.40	0.56	5.01	0.77
<i>FAT1</i>	FAT atypical cadherin 1	-1.92	0.009	Obese down vs Overweight	7.37	0.45	8.03	0.57
<i>HLA-DQA2</i>	major histocompatibility complex, class II, DQ alpha 2	-1.92	0.036	Obese down vs Overweight	5.85	0.56	6.60	0.74
<i>PTPRZ1</i>	protein tyrosine phosphatase, receptor-type, Z polypeptide 1	-1.92	0.019	Obese down vs Overweight	4.21	0.37	4.93	1.21
<i>MIR3134</i>	microRNA 3134	-1.93	0.023	Obese down vs Overweight	2.90	0.55	3.65	0.06
<i>ITGA9</i>	integrin alpha 9	-1.96	0.044	Obese down vs Overweight	6.26	0.63	6.98	0.55
<i>MIR1200</i>	microRNA 1200	-1.96	0.039	Obese down vs Overweight	4.67	0.64	5.50	0.04
<i>GJA1</i>	gap junction protein alpha 1	-1.98	0.032	Obese down vs Overweight	8.37	0.64	8.97	0.35
<i>EZR</i>	ezrin	-2.01	0.032	Obese down vs Overweight	7.26	0.64	7.95	0.24
<i>MAP4K4</i>	mitogen-activated protein kinase kinase kinase 4	-2.01	0.009	Obese down vs Overweight	6.74	0.54	7.38	0.31
<i>NSAP11</i>	nervous system abundant protein 11	-2.02	0.022	Obese down vs Overweight	5.99	0.60	6.66	0.40
<i>LRRC8C</i>	leucine rich repeat containing 8 family, member C	-2.02	0.029	Obese down vs Overweight	3.29	0.61	4.15	0.24
<i>COL1A2</i>	collagen, type I, alpha 2	-2.04	0.009	Obese down vs Overweight	8.83	0.61	9.34	0.08
<i>RAB31</i>	RAB31, member RAS oncogene family	-2.07	0.019	Obese down vs Overweight	6.88	0.61	7.58	0.32
<i>FNDC1</i>	fibronectin type III domain containing 1	-2.08	0.045	Obese down vs Overweight	7.05	0.73	7.69	0.46
<i>MIRLET7A2</i>	microRNA let-7a-2	-2.09	0.015	Obese down vs Overweight	2.04	0.54	3.14	0.51
<i>FAM180A</i>	family with sequence similarity 180, member A	-2.10	0.018	Obese down vs Overweight	6.52	0.65	7.14	0.41
<i>MIR302D</i>	microRNA 302d	-2.11	0.033	Obese down vs Overweight	4.47	0.75	5.02	0.14
<i>BLID</i>	BH3-like motif containing, cell death inducer	-2.13	0.011	Obese down vs Overweight	5.10	0.66	5.63	0.25
<i>TRAJ38</i>	T cell receptor alpha joining 38	-2.14	0.006	Obese down vs Overweight	3.54	0.54	4.42	0.17
<i>TNC</i>	tenascin C	-2.18	0.022	Obese down vs Overweight	10.60	0.79	11.00	0.10
<i>PODXL</i>	podocalyxin-like	-2.18	0.037	Obese down vs Overweight	5.21	0.67	6.10	0.97
<i>TAS2R31</i>	taste receptor, type 2, member 31	-2.26	0.003	Obese down vs Overweight	3.81	0.51	4.85	0.61
<i>MIR548X2</i>	microRNA 548x-2	-2.27	0.012	Obese down vs Overweight	4.42	0.67	5.04	0.85
<i>OLFML2B</i>	olfactomedin like 2B	-2.29	0.027	Obese down vs Overweight	6.45	0.76	7.15	0.56
<i>RUNX1-IT1</i>	RUNX1 intronic transcript 1	-2.30	0.003	Obese down vs Overweight	5.16	0.53	6.04	0.27
<i>COL8A1</i>	collagen, type VIII, alpha 1	-2.34	0.033	Obese down vs Overweight	5.22	0.80	6.02	0.28
<i>ZBTB20-AS4</i>	ZBTB20 antisense RNA 4	-2.36	0.008	Obese down vs Overweight	6.39	0.64	7.24	0.31
<i>C1QB</i>	complement component 1, q subcomponent, B chain	-2.40	0.047	Obese down vs Overweight	5.31	0.84	6.12	1.13
<i>MIR21</i>	microRNA 21	-2.41	0.034	Obese down vs Overweight	7.39	0.88	8.03	0.43
<i>MXRA5</i>	matrix-remodelling associated 5	-2.42	0.004	Obese down vs Overweight	9.05	0.70	9.64	0.28
<i>SATB2</i>	SATB homeobox 2	-2.43	0.027	Obese down vs Overweight	5.65	0.57	6.69	1.60
<i>FABP3</i>	fatty acid binding protein 3, muscle and heart	-2.44	0.045	Obese down vs Overweight	6.97	0.86	7.97	0.79
<i>RUNX2</i>	runt-related transcription factor 2	-2.44	0.027	Obese down vs Overweight	5.51	0.56	6.51	1.72
<i>TMSB10</i>	thymosin beta 10	-2.51	0.042	Obese down vs Overweight	9.75	0.96	10.44	0.38
<i>MIR1245B</i>	microRNA 1245b	-2.52	0.019	Obese down vs Overweight	3.35	0.76	4.29	0.74
<i>CDH11</i>	cadherin 11, type 2, OB-cadherin (osteoblast)	-2.52	0.001	Obese down vs Overweight	6.76	0.54	7.56	0.82
<i>AQP1</i>	aquaporin 1 (Colton blood group)	-2.54	0.048	Obese down vs Overweight	6.63	0.95	7.43	0.58
<i>MIR421</i>	microRNA 421	-2.56	0.025	Obese down vs Overweight	6.79	0.91	7.42	0.33
<i>ANPEP</i>	alanyl (membrane) aminopeptidase	-2.57	0.049	Obese down vs Overweight	6.86	0.94	7.84	0.37
<i>MIR1245A</i>	microRNA 1245a	-2.67	0.013	Obese down vs Overweight	4.25	0.84	4.98	0.66
<i>LAPTM5</i>	lysosomal protein transmembrane 5	-3.51	0.035	Obese down vs Overweight	6.94	1.16	8.15	0.88
<i>LRRC15</i>	leucine rich repeat containing 15	-4.94	0.001	Obese down vs Overweight	7.14	1.00	8.51	0.30

MMP13	matrix metalloproteinase 13	-4.98	0.006	Obese down vs Overweight	6.11	1.12	7.79	1.19
-------	-----------------------------	-------	-------	--------------------------	------	------	------	------

**Multiple test correction performed using the Benjamini–Hochberg step-up procedure to control the false discovery rate at $\alpha = 0.05$. SD = standard deviation*