

Supplementary Table 1. Immunohistochemical expression of HIF-1 α , GLUT1 and MCT4 in normal duodenal epithelium and duodenal adenocarcinoma (DAC).

HIF-1α histoscore	mean	95% CI	p-value
Normal epithelium	182	140-223	
DAC	176	136-217	0.849
MCT4 histoscore	mean	95% CI	
Normal epithelium	55.0	24.5-85.5	
DAC	172	122-222	<0.001
GLUT1 histoscore	mean	95% CI	
Normal epithelium	51.5	20.2-82.2	
DAC	218	172-265	<0.001

Supplementary Figure 1. Immunohistochemical expressions of HIF-1 α , MCT4 and GLUT1 in normal duodenal epithelium and in adenocarcinoma. HIF-1 α staining could be detected both in the nuclei and in the cytoplasm. HIF-1 α showed strongest immunoreaction in the normal epithelium (A) and the expression level remained essentially similar in carcinoma (B). MCT4 expression was present only faintly in the cell membranes of the normal epithelium (C) but it showed significant upregulation in adenocarcinoma (D). GLUT1 expression was both membranous and cytoplasmic. GLUT1 staining was low in normal epithelium (E), but the expression was strong and mostly diffuse in carcinomas (F). Scale bar sizes: (E) = (A, C) = 200 μ m, (B) = (D, F) = 100 μ m.

