**SUPPLEMENTAL MATERIALS ONLINE**

**Immunohistochemical Materials and Methods**

For immunohistochemistry of major basic protein+ (MBP) eosinophils, formalin fixed paraffin

embedded nasal tissues were sectioned at 4 - 5 microns and placed on positively charged slides.

Slides were deparaffinized and proteolytic enzyme pretreatment was performed using 0.04% Pepsin in 0.2N HCl heated to 37°C. After which slides were allowed to sit at room temperature for 20 minutes followed by running tap and distilled water rinses. The remainder of this protocol was performed on the Biocare intelliPath Flex™ (Biocare Medical, Pacheco, Ca) automated

immunostaining platform using ProMARK™ detection reagents with AutoWash buffer rinses

between each step. Nonspecific proteins were blocked with Rodent Block M (Biocare) for 5 minutes followed by incubation in Rat anti-Mouse MBP Primary antibody (Mayo, Rochester, MN) diluted 1:10,000 in normal antibody diluent (Syctek Labs, Logan-UT) for 1 hour. This was followed by treatment with a rat anti-mouse alkaline phosphatase probe (Biocare) for 40 minutes and then by a rat anti-mouse alkaline phosphatase polymer (Biocare) for 1 hour. The reaction was developed with IP 20 flex Warp Red (Biocare) for 10 minutes followed by counter stain with CATHE hematoxylin (Biocare) diluted 1:10 in distilled water for 1 minute. Post staining, slides were rinsed in distilled water and allowed to air dry completely, dipped in xylene and cover slipped with Permount (Fisher Scientific, Fair Lawn, NJ) media.

For immunohistochemistry of GATA-3+ lymphoid cells, formalin fixed paraffin embedded nasal

tissues were sectioned at 4 - 5 microns and placed on positively charged slides. Slides were

deparaffinized followed by heat induced epitope retrieval utilizing TRIS/EDTA pH 9.0 buffer

(Scytek Labs – Logan, UT) in a vegetable steamer, followed by endogenous peroxidase blocking in hydrogen peroxide + methanol for 30 minutes and then rinsed in running tap and distilled water. The remainder of this protocol was performed on the Biocare intelliPath Flex™ (Biocare Medical, Pacheco, Ca) automated immunostaining platform using ProMARK™ detection reagents with AutoWash buffer rinses between each step. Nonspecific proteins were blocked with Rodent Block M (Biocare) for 10 minutes followed by incubation in Rabbit anti-GATA-3 Primary antibody (Abcam, Cambridge, MA) diluted 1:500 in normal antibody diluent (Syctek) for 1 hour and then Rabbit on Rodent HRP Polymer (Biocare) for 30 minutes. The histochemical reaction was developed with DAB (Biocare) for 5 minutes followed by counter stain with CATHE hematoxylin (Biocare) diluted 1:10 in distilled water for 1 minute. Post staining slides are rinsed in distilled water, dehydrated in ethanol, cleared in xylene and cover slipped with Optic Mount 1 media (Mercedes Medical, Sarasota, FL).