

Figure S1. Effect of omalizumab on pulmonary function and sinusitis. FEV₁ (A), Asthma Control Test (ACT) (B), polyp score (C) and sinus CT score (D) were evaluated pre- and post-treatment with omalizumab. Individual values of the responder group ($n = 19$) and the non-responder group ($n = 6$) are shown; * $P < 0.05$, ** $P < 0.01$ (vs. pre-treatment).

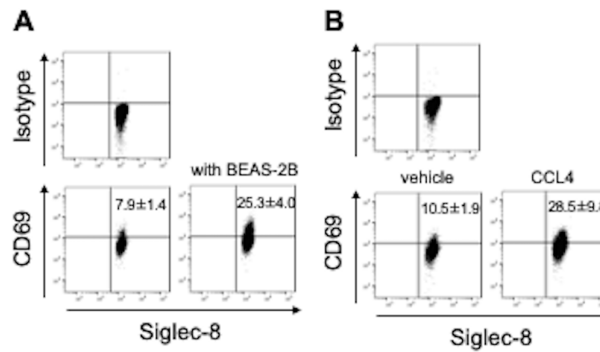


Figure S2. CD69 expression on human eosinophils. Purified peripheral blood eosinophils were incubated with BEAS-2B cells (A) or CCL4 (10 $\mu\text{g/mL}$) (B) overnight. CD69 expression on eosinophils was evaluated. Values in dot-plot panels (% of CD69+ Siglec-8+ double-positive cells) represent the mean \pm SEM values of four experiments.

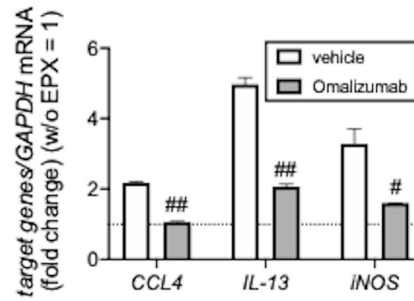


Figure S3. Effect of omalizumab on indicators of type 2 inflammation. BEAS-2B cells co-incubated with recombinant eosinophil peroxidase (EPX, 10µg/mL; Proteintech, Rosemont, IL, USA) for 72 h were treated with omalizumab (10 µg/mL) overnight. mRNA levels of CCL4, IL-13 and iNOS in BEAS-2B cells were evaluated. Values in panel represent the mean ± SEM values of three experiments; * $P < 0.05$, ** $P < 0.01$ (vs. non-treatment control without EPX).

Table S1. Amplification primers (5'–3')

gene	forward	reverse
<i>PPP2CA</i>	CGC CAT TAC AGA GAG CCG AG	GTA CTT CTG GCG GCT GTT GA
<i>CCL4</i>	CTC CTC ATG CTA GTA GCT GCC TTC	GGT GTA AGA AAA GCA GCA GGC GGT
<i>IL-13</i>	CTG ACA GCT GGC ATG TAC TGT G	TGT CTC GGA CAT GCA AGC TG
<i>iNOS</i>	ATC TCT GGT CAA GCT GGA TGC	GCC TTA TGG TGA AGT GTG TCT TG
<i>GAPDH</i>	TTC ACC ACC ATG GAG AAG GC	AGG AGG CAT TGC TGA TGA TCT