

## Anti-CCL11 [CAT-213 (Bertilimumab; iCo-008)] Standard Size Ab04187-3.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted mouse IgG2b Fc Silent™ antibody, based on the original mouse IgG4 format, created for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG2b, [Fc Silent™](#), Kappa

**Clone Number:** CAT-213 (Bertilimumab; iCo-008)

**Alternative Name(s) of Target:** SCYA11; Eotaxin; C-C motif chemokine 11; Eosinophil chemotactic protein; Small-inducible cytokine A11; 3G3

**UniProt Accession Number of Target Protein:** P51671

**Published Application(s):** inhibit, neutralize, ELISA

**Published Species Reactivity:** Human

**Immunogen:** The original scFv antibody 3G3 was isolated from a human scFv phage display library after three rounds of panning against human eotaxin1. Optimization of 3G3 was conducted by heavy chain CDR3 randomization with point mutagenesis and light chain shuffling to obtain CAT-212 (scFv). Later on the sequence of CAT-212 was used to generate human IgG4 version of the antibody, which was called CAT-213.

**Specificity:** This antibody binds human eotaxin (CCL11). This CC chemokine directly promotes the accumulation of eosinophils in response to the presence of allergens, which is a prominent feature of allergic inflammatory reactions. It binds to CCR3.

**Application Notes:** The binding specificity of this antibody for eotaxin 1 was demonstrated using ELISA. The scFv version of this antibody binds human eotaxin1 with a dissociation constant (KD) of 80.4 pM. This antibody demonstrated inhibition of eotaxin1 stimulated chemotaxis of L1.2-hCCR3 cells in vitro. This antibody also inhibited eotaxin1-induced eosinophil shape change with an IC50 of 0.71 nM. In vivo administration of human eotaxin1 to the air pouch of ovalbumin-sensitized mice treated with IL-5 caused a significant dose-related increase in the recruitment of leukocytes to the pouch after 6 h (PMID: 16973884). A paper studied the contribution of eotaxin to chemotactic activity was studied by using a high-affinity neutralizing human anti-eotaxin antibody, CAT213. It was reported that this antibody significantly inhibited chemotactic activity of eosinophils in all asthmatic groups (PMID: 15001461)

**Antibody First Published in:** Main et al. A potent human anti-eotaxin1 antibody, CAT-213: isolation by

phage display and in vitro and in vivo efficacy. J Pharmacol Exp Ther. 2006 Dec;319(3):1395-404.

[PMID:16973884](#)

**Note on publication:** This paper describes the generation, in vitro and in vivo characterization of this antibody.

## Product Form

**Size:** 100 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.