



eotaxin-3 (V-16): sc-19353

BACKGROUND

Chemokines have been implicated in the regulation of stem/progenitor cell proliferation and movement. CC chemokines, myeloid progenitor inhibitory factor-1 (MPIF)-1 and eotaxin-2 (also known as MPIF-2, CK beta-6, or small inducible cytokine A24), both map to chromosome 7q11.23. MPIF-1 has chemotactic activity on dendritic cells derived from either peripheral blood monocytes or cord blood CD34⁺ progenitors. MPIF-1 is also a potent suppressor of bone marrow low proliferative potential colony-forming cells. Eotaxin-2 promotes chemotaxis and Ca²⁺ mobilization in human eosinophils that exerts its activity solely through the CCR3 receptor. In addition, eotaxin-2 lacks suppressive activity against immature subsets of myeloid progenitors, which have been stimulated to proliferate by multiple growth factors. Eotaxin-3 is a CC chemokine which shares only 33% amino acid identity with eotaxin-2, however eotaxin-3 shares many characteristics with eotaxin-2. Eotaxin-3 induces migration of eosinophils and basophils only at a 10-fold higher concentration than eotaxin. The gene which encodes eotaxin-3 maps to human chromosome 7q11.2.

REFERENCES

1. Patel, V.P., et al. 1997. Molecular and functional characterization of two novel human C-C chemokines as inhibitors of two distinct classes of myeloid progenitors. *J. Exp. Med.* 185: 1163-1172.
2. White, J.R., et al. 1997. Cloning and functional characterization of a novel human CC chemokine that binds to the CCR3 receptor and activates human eosinophils. *J. Leukoc. Biol.* 62: 667-675.
3. Broxmeyer, H.E., et al. 1999. Effects of CC, CXC, C, and CX3C chemokines on proliferation of myeloid progenitor cells, and insights into SDF-1-induced chemotaxis of progenitors. *Annu. NY Acad. Sci.* 872: 142-162.
4. Nardelli, B., et al. 1999. Dendritic cells and MPIF-1: chemotactic activity and inhibition of endogenous chemokine production by IFN-gamma and CD40 ligation. *J. Leukoc. Biol.* 65: 822-828.
5. Kitaura, M., et al. 1999. Molecular cloning of a novel human CC chemokine (eotaxin-3) that is a functional ligand of CC chemokine receptor 3. *J. Biol. Chem.* 274: 27975-27980.
7. Guo, R.F., et al. 1999. Molecular cloning and characterization of a novel human CC chemokine, SCYA26. *Genomics* 58: 313-317.
6. LocusLink Report (LocusID: 604697). <http://www.ncbi.nlm.nih.gov/LocusLink>

SOURCE

eotaxin-3 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of eotaxin-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19353 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

eotaxin-3 (V-16) is recommended for detection of eotaxin-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for eotaxin-3 siRNA (h): sc-63312.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Inomata, M., et al. 2009. IL-4 alters expression patterns of storage components of vascular endothelial cell-specific granules through STAT6- and SOCS-1-dependent mechanisms. *Mol. Immunol.* 46: 2080-2089.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.