

eotaxin-3 (500-M32): sc-65349

BACKGROUND

Chemokines have been implicated in the regulation of stem/progenitor cell proliferation and movement. C-C chemokines myeloid progenitor inhibitory factor-1 (MIP1F)-1 and eotaxin-2 (also known as MIP1F-2, CK β-6 or small inducible cytokine A24) both map to chromosome 7q11.23. MIP1F-1 has chemotactic activity on dendritic cells derived from either peripheral blood monocytes or cord blood CD34⁺ progenitors. It is also a potent suppressor of bone marrow low proliferative potential colony-forming cells. Eotaxin-2, which promotes chemotaxis and Ca²⁺ mobilization in human eosinophils, 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. A related C-C chemokine, eotaxin-3, shares only 33% amino acid identity with eotaxin-2, but shares many characteristics with eotaxin-2. Eotaxin-3 induces migration of eosinophils and basophils at a 10-fold higher concentration than eotaxin-2. The gene which encodes eotaxin-3 maps to human chromosome 7q11.23.

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 C-C 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 C-C, C-X-C, C, and CX3C chemokines on proliferation of myeloid progenitor cells, and insights into SDF-1-induced chemotaxis of progenitors. *Ann. N.Y. Acad. Sci.* 872: 142-162.
4. Nardelli, B., et al. 1999. Dendritic cells and MIP1F-1: chemotactic activity and inhibition of endogenous chemokine production by IFN-γ and CD40 ligation. *J. Leukoc. Biol.* 65: 822-828.
5. Kitaura, M., et al. 1999. Molecular cloning of a novel human C-C chemokine (eotaxin-3) that is a functional ligand of C-C chemokine receptor 3. *J. Biol. Chem.* 274: 27975-27980.
6. Guo, R.F., et al. 1999. Molecular cloning and characterization of a novel human C-C chemokine, SCYA26. *Genomics* 58: 313-317.
7. LocusLink Report (LocusID: 604697). <http://www.ncbi.nlm.nih.gov/LocusLink>

CHROMOSOMAL LOCATION

Genetic locus: CCL26 (human) mapping to 7q11.23.

SOURCE

eotaxin-3 (500-M32) is a mouse monoclonal antibody raised against recombinant eotaxin-3 of human origin.

PRODUCT

Each vial contains 100 μg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

eotaxin-3 (500-M32) is recommended for detection of eotaxin-3 of human origin by 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, eotaxin-3 shRNA Plasmid (h): sc-63312-SH and eotaxin-3 shRNA (h) Lentiviral Particles: sc-63312-V.

Molecular Weight of eotaxin-3: 11 kDa.

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 for detailed protocols and support products.