

# eotaxin-2 (5C38): sc-71053

## BACKGROUND

Chemokines have been implicated in the regulation of stem/progenitor cell proliferation and movement. The C-C chemokine eotaxin-2 (also known as MPIF-2, CK  $\beta$ -6 or small inducible cytokine A24), which promotes chemotaxis and  $\text{Ca}^{2+}$  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. While eotaxin-2 is functionally similar to eotaxin, they share only 39% amino acid homology and differ almost completely in the  $\text{NH}_2$ -terminal region.

## 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. Forssmann, U., et al. 1997. eotaxin-2, a novel C-C chemokine that is selective for the chemokine receptor CCR3, and acts like eotaxin on human eosinophil and basophil leukocytes. *J. Exp. Med.* 185: 2171-2176.
3. 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.
4. Elsner, J., et al. 1998. eotaxin-2 activates chemotaxis-related events and release of reactive oxygen species via pertussis toxin-sensitive G proteins in human eosinophils. *Eur. J. Immunol.* 28: 2152-2158.
5. Ying, S., et al. 1999. C-C chemokines in allergen-induced late-phase cutaneous responses in atopic subjects: association of eotaxin with early 6-hour eosinophils, and of eotaxin-2 and monocyte chemoattractant protein-4 with the later 24-hour tissue eosinophilia, and relationship to basophils and other C-C chemokines (monocyte chemoattractant protein-3 and RANTES). *J. Immunol.* 163: 3976-3984.
6. 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.
7. 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.
8. Schaefer, D., et al. 2006. Endothelial and epithelial expression of eotaxin-2 (CCL24) in nasal polyps. *Int. Arch. Allergy Immunol.* 140: 205-214.
9. Scheicher, M.E., et al. 2007. eotaxin-2 in sputum cell culture to evaluate asthma inflammation. *Eur. Respir. J.* 29: 489-495.

## CHROMOSOMAL LOCATION

Genetic locus: CCL24 (human) mapping to 7q11.23.

## SOURCE

eotaxin-2 (5C38) is a mouse monoclonal antibody raised against recombinant eotaxin-2 of human origin.

## PRODUCT

Each vial contains 100  $\mu\text{g}$  IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

eotaxin-2 (5C38) is recommended for detection of eotaxin-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for eotaxin-2 siRNA (h): sc-63311, eotaxin-2 shRNA Plasmid (h): sc-63311-SH and eotaxin-2 shRNA (h) Lentiviral Particles: sc-63311-V.

Molecular Weight of eotaxin-2: 10 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](http://www.scbt.com) for detailed protocols and support products.