

eotaxin (G-1): sc-374233

BACKGROUND

Eotaxin (also designated eotaxin-1) is a member of the C-C or β family of chemokines which is characterized by a pair of adjacent cysteine residues. Eotaxin was first purified from the bronchoalveolar lavage fluid of guinea pigs challenged with an aerosol allergen, and serves as a potent chemoattractant for eosinophils. Eosinophilia is a prominent feature of several allergic conditions and is thought to be a central event in maladies such as bronchial asthma, dermatitis, conjunctivitis and possibly inflammatory bowel disease. The cognate eotaxin receptor has been identified. Originally described as mouse orphan receptor (MIP-1a receptor-like 2), CKR-3 has been shown to not only serve as the high affinity receptor for eotaxin, but also for RANTES and MCP-3. CKR-3 is expressed on the cell surface of primary eosinophils and does not bind to other members of the C-C or C-X-C family of chemokines. CKR-3 also serves as a co-receptor for a restricted subset of viruses.

REFERENCES

1. Jose, P.J., et al. 1994. Eotaxin: a potent eosinophil chemoattractant cytokine detected in a guinea pig model of allergic airways inflammation. *J. Exp. Med.* 179: 881-887.
2. Jose, P.J., et al. 1994. Eotaxin: cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged guinea pig lungs. *Biochem. Biophys. Res. Commun.* 205: 788-794.
3. Ponath, P.D., et al. 1996. Cloning of the human eosinophil chemoattractant, eotaxin. Expression, receptor binding, and functional properties suggest a mechanism for the selective recruitment of eosinophils. *J. Clin. Invest.* 97: 604-612.
4. Garcia-Zepeda, E.A., et al. 1996. Human eotaxin is a specific chemoattractant for eosinophil cells and provides a new mechanism to explain tissue eosinophilia. *Nat. Med.* 2: 449-456.

CHROMOSOMAL LOCATION

Genetic locus: CCL11 (human) mapping to 17q12; Ccl11 (mouse) mapping to 11 C.

SOURCE

eotaxin (G-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 69-95 at the C-terminus of eotaxin of rat origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-374233 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

eotaxin (G-1) is recommended for detection of eotaxin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 siRNA (h): sc-43753, eotaxin siRNA (m): sc-63310, eotaxin shRNA Plasmid (h): sc-43753-SH, eotaxin shRNA Plasmid (m): sc-63310-SH, eotaxin shRNA (h) Lentiviral Particles: sc-43753-V and eotaxin shRNA (m) Lentiviral Particles: sc-63310-V.

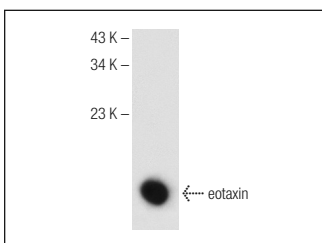
Molecular Weight of eotaxin: 8 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



eotaxin (G-1): sc-374233. Western blot analysis of eotaxin expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

1. Langhanki, J., et al. 2014. Total synthesis and biological evaluation of the natural product (-)-cyclonerodiol, a new inhibitor of IL-4 signaling. *Org. Biomol. Chem.* 12: 9707-9715.

RESEARCH USE

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



See **MCP-1-4/eotaxin (B-2): sc-377082** for MCP-1-4/eotaxin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.