SANTA CRUZ BIOTECHNOLOGY, INC.

eotaxin (C-3): sc-373767

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

eotaxin (C-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 71-96 at the C-terminus of eotaxin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

eotaxin (C-3) is available conjugated to agarose (sc-373767 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-373767 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373767 PE), fluorescein (sc-373767 FITC), Alexa Fluor® 488 (sc-373767 AF488), Alexa Fluor® 546 (sc-373767 AF546), Alexa Fluor® 594 (sc-373767 AF594) or Alexa Fluor® 647 (sc-373767 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373767 AF680) or Alexa Fluor® 790 (sc-373767 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373767 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

eotaxin (C-3) 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 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

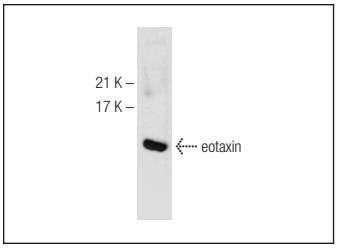
Suitable for use as control antibody for eotaxin siRNA (h): sc-43753, eotaxin siRNA (m): sc-63310, eotaxin shRNA Plasmid (h): sc-43753-SH, eotaxin shRNA Plasmid (m): sc-63310-SH, eotaxin shRNA (h) Lentiviral Particles: sc-43753-V and eotaxin shRNA (m) Lentiviral Particles: sc-63310-V.

Molecular Weight of eotaxin: 8 kDa.

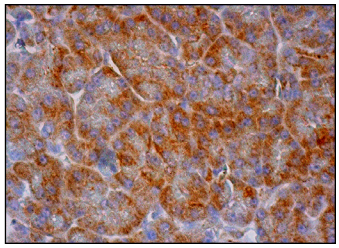
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



eotaxin (C-3): sc-373767. Western blot analysis of human recombinant eotaxin under non-reducing conditions.



eotaxin (C-3): sc-373767. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells.

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.