

CCL14 (C-12): sc-34875

BACKGROUND

Chemokines are members of a superfamily of inducible, secreted, pro-inflammatory cytokines. Members of the chemokine family exhibit 20 to 50% homology in their predicted amino acid sequences and are divided into four subfamilies. CCL14 belongs to the intercrine β (chemokine C-C) family. CCL14 has weak activities on human monocytes and acts via receptors that also recognize MIP-1 α . CCL14 also enhances the proliferation of CD34 myeloid progenitor cells. The processed form of CCL14, designated HCC-1(9-74), is a chemotactic factor that attracts monocytes, eosinophils and T cells and is a ligand for CCR1, CCR3 and CCR5. Various membrane-associated and soluble proteases selectively cleave specific chemokines. Precursor plasma chemokines (CXCL7, CCL14) need to be proteolytically processed to obtain receptor affinity.

REFERENCES

1. Munch, J., et al. 2002. Hemofiltrate CC chemokine 1[9-74] causes effective internalization of CCR5 and is a potent inhibitor of R5-tropic human immunodeficiency virus type 1 strains in primary T cells and macrophages. *Antimicrob. Agents Chemother.* 46: 982-990.
2. Forssmann, U., et al. 2004. n-Nonanoyl-CC chemokine ligand 14, a potent CC chemokine ligand 14 analogue that prevents the recruitment of eosinophils in allergic airway inflammation. *J. Immunol.* 173: 3456-3466.
3. Shen, Y., et al. 2004. Distinct gene expression profiles in different B cell compartments in human peripheral lymphoid organs. *BMC Immunol.* 5: 20.
4. Van Damme, J., et al. 2004. Chemokine-protease interactions in cancer. *Semin. Cancer Biol.* 14: 201-208.
5. Blain, K.Y., et al. 2007. Structural and functional characterization of CC chemokine CCL14. *Biochemistry* 46:10008-10015.

CHROMOSOMAL LOCATION

Genetic locus: CCL14 (human) mapping to 17q12.

SOURCE

CCL14 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CCL14 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34875 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

CCL14 (C-12) is recommended for detection of CCL14 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 CCL14 siRNA (h): sc-45580, CCL14 shRNA Plasmid (h): sc-45580-SH and CCL14 shRNA (h) Lentiviral Particles: sc-45580-V.

Molecular Weight of CCL14: 9 kDa.

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.

RESEARCH USE

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