

# CCL14 (E-5): sc-28388

## 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  $\beta$  (chemokine C-C) family. CCL14 has weak activities on human monocytes and acts via receptors that also recognize MIP-1 $\alpha$ . 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

- 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.
- 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.
- Shen, Y., et al. 2004. Distinct gene expression profiles in different B cell compartments in human peripheral lymphoid organs. *BMC Immunol.* 5: 20.

## CHROMOSOMAL LOCATION

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

## SOURCE

CCL14 (E-5) is a mouse monoclonal antibody raised against amino acids 22-93 of CCL14 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CCL14 (E-5) is recommended for detection of CCL14 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 CCL14 siRNA (h): sc-45580, CCL14 shRNA Plasmid (h): sc-45580-SH and CCL14 shRNA (h) Lentiviral Particles: sc-45580-V.

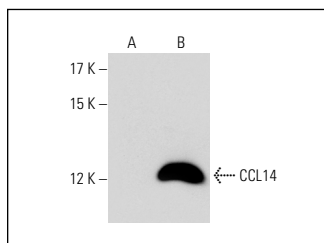
Molecular Weight of CCL14: 9 kDa.

Positive Controls: CCL14 (h2): 293T Lysate: sc-116022.

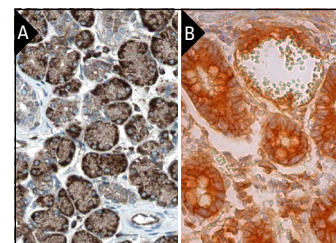
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



CCL14 (E-5): sc-28388. Western blot analysis of CCL14 expression in non-transfected: sc-117752 (A) and human CCL14 transfected: sc-116022 (B) 293T whole cell lysates.



HCC-1 (E-5): sc-28388. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cell. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing membrane and cytoplasmic staining of glandular cells (B).

## SELECT PRODUCT CITATIONS

- Li, W., et al. 2016. Proteomics analysis reveals a Th17-prone cell population in presymptomatic graft-versus-host disease. *JCI Insight* 1: e86660.
- Flamini, M.I., et al. 2017. Thyroid hormone controls breast cancer cell movement via Integrin  $\alpha$ V/ $\beta$ 3/Src/FAK/PI3-kinases. *Horm. Cancer* 8: 16-27.

## 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.