SANTA CRUZ BIOTECHNOLOGY, INC.

CCL14 (E-12): sc-376152

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-1α. 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 immuno-deficiency 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.

CHROMOSOMAL LOCATION

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

SOURCE

CCL14 (E-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 65-93 at the C-terminus of CCL14 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CCL14 (E-12) is available conjugated to agarose (sc-376152 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376152 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376152 PE), fluorescein (sc-376152 FITC), Alexa Fluor® 488 (sc-376152 AF488), Alexa Fluor® 546 (sc-376152 AF546), Alexa Fluor® 594 (sc-376152 AF594) or Alexa Fluor® 647 (sc-376152 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376152 AF680) or Alexa Fluor® 790 (sc-376152 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376152 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

CCL14 (E-12) 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 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 CCL14 siRNA (h): sc-45580, CCL14 shRNA Plasmid (h): sc-45580-SH and CCL14 shRNA (h) Lentiviral Particles: sc-45580-V.

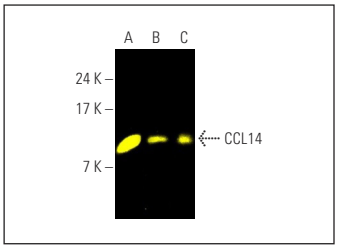
Molecular Weight of CCL14: 9 kDa.

Positive Controls: HUV-EC-C whole cell lysate: sc-364180, human bladder extract: sc-363751 or U266 whole cell lysate: sc-364800.

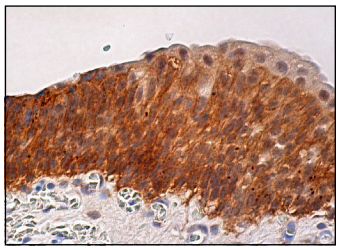
RECOMMENDED SUPPORT REAGENTS

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



CCL14 (E-12) Alexa Fluor® 488: sc-376152 AF488. Direct fluorescent western blot analysis of CCL14 expression in HUV-EC-C (**A**) and U266 (**B**) whole cell lysates and human bladder tissue extract (**C**). Blocked with UltraCruz® Blocking Reagent: sc-516214.



CCL14 (E-12): sc-376152. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial 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.