

# CCL23 (S-12): sc-46071

## BACKGROUND

Small inducible cytokine A23 precursor (CCL23), or CK- $\beta$ -8, is a chemokine that binds to the receptor CCR1. It is involved in the immune response and inhibits production of polymorphonuclear leukocytes (PMNs) and monocytes in bone marrow. In addition, CCL23 has a splice variant, CK- $\beta$ -8-1, and both variants chemoattract lymphocytes, monocytes and neutrophils. CCL23 also promotes angiogenesis and endothelial cell migration via its actions on the CCR1 receptor. Proinflammatory proteases cleave an N-terminal domain of CCL23, improving the potency of its CCR1-mediated signaling up to 1000-fold *in vitro*. N-truncated CCL23 is found in high levels in synovial fluids of rheumatoid arthritis patients, suggesting a role of protease release during an inflammatory response. High levels of CCL23 mRNA expression occur in human fetal bone osteoblasts and chondrocytes, indicating a possible role for CCL23 in the recruitment of osteoclast precursors to the sites of bone reabsorption.

## REFERENCES

1. Youn, B.S., et al. 1998. Characterization of CK $\beta$ 8 and CK $\beta$ 8-1: two alternatively spliced forms of human  $\beta$ -chemokine, chemoattractants for neutrophils, monocytes, and lymphocytes, and potent agonists at CC chemokine receptor 1. *Blood* 91: 3118-3126.
2. Votta, B.J., et al. 2000. CK $\beta$ 8 [CCL23], a novel CC chemokine, is chemotactic for human osteoclast precursors and is expressed in bone tissues. *J. Cell. Physiol.* 183: 196-207.
3. Clark, V.J., et al. 2004. Haplotype structure and linkage disequilibrium in chemokine and chemokine receptor genes. *Hum. Genomics* 1: 255-273.
4. Shih, C.H., et al. 2005. CCL23/myeloid progenitor inhibitory factor-1 inhibits production and release of polymorphonuclear leukocytes and monocytes from the bone marrow. *Exp. Hematol.* 33: 1101-1108.
5. Hwang, J., et al. 2005. Human CC chemokine CCL23, a ligand for CCR1, induces endothelial cell migration and promotes angiogenesis. *Cytokine* 30: 254-263.
6. Berahovich, R.D., et al. 2005. Proteolytic activation of alternative CCR1 ligands in inflammation. *J. Immunol.* 174: 7341-7351.

## CHROMOSOMAL LOCATION

Genetic locus: CCL23 (human) mapping to 17q12.

## SOURCE

CCL23 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCL23 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-46071 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CCL23 (S-12) is recommended for detection of CCL23 of human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

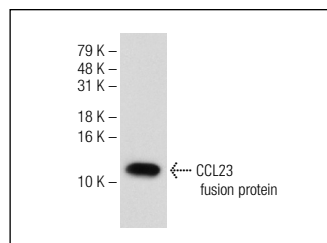
Suitable for use as control antibody for CCL23 siRNA (h): sc-45634, CCL23 shRNA Plasmid (h): sc-45634-SH and CCL23 shRNA (h) Lentiviral Particles: sc-45634-V.

Molecular Weight of CCL23: 13 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



CCL23 (S-12): sc-46071. Western blot analysis of human recombinant CCL23 fusion protein.

## 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.

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Try **CCL23 (H-2): sc-393897**, our highly recommended monoclonal alternative to CCL23 (S-12).