

# CCL23 (H-2): sc-393897



The Power to Question

## 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 1,000-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.

## CHROMOSOMAL LOCATION

Genetic locus: CCL23/CCL15 (human) mapping to 17q12.

## SOURCE

CCL23 (H-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 26-49 at the N-terminus of CCL23 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CCL23 (H-2) is available conjugated to agarose (sc-393897 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393897 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393897 PE), fluorescein (sc-393897 FITC), Alexa Fluor<sup>®</sup> 488 (sc-393897 AF488), Alexa Fluor<sup>®</sup> 546 (sc-393897 AF546), Alexa Fluor<sup>®</sup> 594 (sc-393897 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-393897 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-393897 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-393897 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393897 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

CCL23 (H-2) is recommended for detection of CCL23 and CCCL15 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

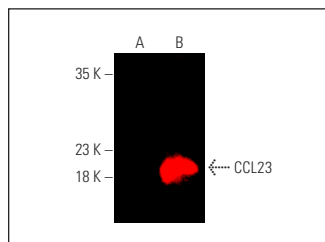
Molecular Weight of CCL23: 13 kDa.

Positive Controls: human CCL23 transfected HEK293T whole cell lysate.

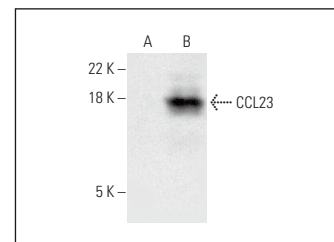
## RECOMMENDED SUPPORT REAGENTS

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.

## DATA



CCL23 (H-2): sc-393897. Fluorescent western blot analysis of CCL23 expression in non-transfected (A) and human CCL23 transfected (B) HEK293T whole cell lysates. Blocked with UltraCruz<sup>®</sup> Blocking Reagent: sc-516214. Detection reagent used: m-IgG $_1$  BP-CFL 790: sc-533666.



CCL23 (H-2): sc-393897. Western blot analysis of CCL23 expression in non-transfected (A) and human CCL23 transfected (B) HEK293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Du, X., et al. 2021. Eosinophil-derived chemokine (hCCL15/23, mCCL6) interacts with CCR1 to promote eosinophilic airway inflammation. *Signal Transduct. Target. Ther.* 6: 91.

## STORAGE

Store at 4<sup>°</sup> 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.