ChemR23 (H-6): sc-398769



The Power to Question

BACKGROUND

The C-X3-C chemokine family is characterized by two cysteines separated by three amino acid residues. Fractalkine is a member of this chemokine family that binds CX3CR1, previously named V28, and chemokine β receptor-like 1 (CMKBRL1) with high affinity, to induce either leukocyte adhesion and migration or chemotactic functions. CX3CR1 functions with CD4 as a co-receptor for the HIV-1 virus envelope protein, and patients homozygous for a variant haplotype of CX3CR1 progress to AIDS more rapidly than those with other haplotypes. Chemokine receptor-like 1 (also designated G protein-coupled receptor DEZ or ChemR23) belongs to the G protein-coupled receptor 1 family. It is an integral membrane protein functioning as a receptor, possibly a chemotactic peptide receptor. It also acts as a coreceptor for various SIV strains and for a primary HIV-1 strain. ChemR23 is highly expressed in developing osseous and cartilaginous tissue, brain, kidney, gastrointestinal tissues and myeloid tissue, as well as in adult parathyroid glands.

CHROMOSOMAL LOCATION

Genetic locus: CMKLR1 (human) mapping to 12q23.3; Cmklr1 (mouse) mapping to 5 F.

SOURCE

ChemR23 (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-23 within an N-terminal extracellular domain of ChemR23 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ChemR23 (H-6) is available conjugated to agarose (sc-398769 AC), 500 $\mu g/0.25$ ml agarose in 1 ml, for IP; to HRP (sc-398769 HRP), 200 $\mu g/ml$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398769 PE), fluorescein (sc-398769 FITC), Alexa Fluor* 488 (sc-398769 AF488), Alexa Fluor* 546 (sc-398769 AF546), Alexa Fluor* 594 (sc-398769 AF594) or Alexa Fluor* 647 (sc-398769 AF647), 200 $\mu g/ml$, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-398769 AF680) or Alexa Fluor* 790 (sc-398769 AF790), 200 $\mu g/ml$, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398769 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

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 for detailed protocols and support products.

APPLICATIONS

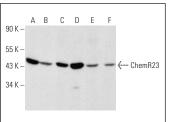
ChemR23 (H-6) is recommended for detection of ChemR23 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 ChemR23 siRNA (h): sc-44633, ChemR23 siRNA (m): sc-44634, ChemR23 siRNA (r): sc-270439, ChemR23 shRNA Plasmid (h): sc-44633-SH, ChemR23 shRNA Plasmid (m): sc-44634-SH, ChemR23 shRNA Plasmid (r): sc-270439-SH, ChemR23 shRNA (h) Lentiviral Particles: sc-44633-V, ChemR23 shRNA (m) Lentiviral Particles: sc-44634-V and ChemR23 shRNA (r) Lentiviral Particles: sc-270439-V.

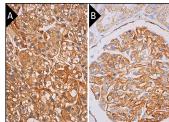
Molecular Weight of ChemR23: 42 kDa.

Positive Controls: mouse stomach extract: sc-394628, c4 whole cell lysate: sc-364186 or Neuro-2A whole cell lysate: sc-364185.

DATA







ChemR23 (H-6): sc-398769. Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing membrane and cytoplasmic staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane and cytoplasmic staining of cells in glomeruli (B).

SELECT PRODUCT CITATIONS

- Darios, E.S., et al. 2016. The adipokine chemerin amplifies electrical field-stimulated contraction in the isolated rat superior mesenteric artery. Am. J. Physiol. Heart Circ. Physiol. 311: H498-H507.
- Lavis, P., et al. 2022. Chemerin plasma levels are increased in COVID-19 patients and are an independent risk factor of mortality. Front. Immunol. 13: 941663.
- 3. Jia, X., et al. 2023. High-intensity swimming alleviates nociception and neuroinflammation in a mouse model of chronic post-ischemia pain by activating the resolvin E1-chemerin receptor 23 axis in the spinal cord. Neural Regen. Res. 18: 2535-2544.
- Ma, Y., et al. 2024. Chemerin attenuates acute kidney injury by inhibiting ferroptosis via the AMPK/NRF2/SLC7A11 axis. Commun. Biol. 7: 1679.

RESEARCH USE

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