SANTA CRUZ BIOTECHNOLOGY, INC.

ChemR23 (C-14): sc-32651

SANTA CRUZ BIOTECHNOLOGY

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 co-receptor 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.

REFERENCES

1. Samson, M. et al. 1998. ChemR23, a putative chemoattractant receptor, is expressed in monocyte-derived dendritic cells and macrophages and is a co-receptor for SIV and some primary HIV-1 strains. Eur. J. Immunol. 28: 1689-1700.
2. Meder, W. et al. 2003. Characterization of human circulating TIG2 as a ligand for the orphan receptor ChemR23. FEBS Lett. 555: 495-499.
3. Hillman, R.T. et al. 2004. An unappreciated role for RNA surveillance. Genome Biol. 5: R8.

CHROMOSOMAL LOCATION

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

SOURCE

ChemR23 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of ChemR23 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32651 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

ChemR23 (C-14) is recommended for detection of ChemR23 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ChemR23 (C-14) is also recommended for detection of ChemR23 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ChemR23 siRNA (h): sc-44633, ChemR23 siRNA (m): sc-44634, ChemR23 shRNA Plasmid (h): sc-44633-SH, ChemR23 shRNA Plasmid (m): sc-44634-SH, ChemR23 shRNA (h) Lentiviral Particles: sc-44633-V and ChemR23 shRNA (m) Lentiviral Particles: sc-44634-V.

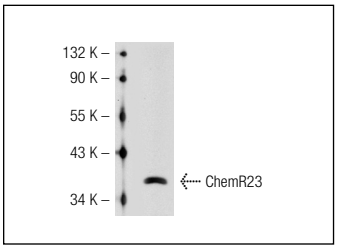
Molecular Weight of ChemR23: 42 kDa.

Positive Controls: JAR cell lysate: sc-2276.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ Mounting Medium: sc-24941.

DATA



ChemR23 (C-14): sc-32651. Western blot analysis of ChemR23 expression in JAR whole cell lysate.

RESEARCH USE

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