SANTA CRUZ BIOTECHNOLOGY, INC.

Chemokine Receptor D6 (B-12): sc-365718



BACKGROUND

Chemokine Receptor D6 (also designated chemokine-binding protein 2, C-C Chemokine Receptor D6, CCR-9, CCR-10, and CMKBR9) is a member of the C-C (ß chemokine) G protein-coupled receptor family. This family is characterized by a pair of adjacent cysteine residues. C-C Chemokine Receptor family members also include CKR-1, CKR-2A, CKR-2B, CKR-3, CKR-4, CKR-5, CKR-6, CKR-7, CKR-8, CKR-9, CKR-10, CCXCKR, Bonzo, BOB (brother of Bonzo) and Duffy blood group antigen. Each of these receptors are G protein-coupled, seven pass transmembrane domain proteins whose major physiological role is to function in the chemotaxis of T cells and phagocytic cells to sites of inflammation. Chemokine Receptor D6 acts as a receptor for various C-C type chemokines, including SCYA2/MCP-1, SCY3/MIP-1-α, SCYA5/RANTES and SCYA7/MCP-3. It is expressed primarily in placental tissues and fetal liver, but is also detected in lymphatic endothelial cells, lymph nodes and mucosa of the small and large intestines.

REFERENCES

- 1. Nibbs, R.J., et al. 1997. Cloning and characterization of a novel promiscuous human β-Chemokine Receptor D6. J. Biol. Chem. 272: 32078-32083.
- 2. Bonini, J.A., et al. 1997. Cloning, expression, and chromosomal mapping of a novel human CC-chemokine receptor (CCR10) that displays high-affinity binding for MCP-1 and MCP-3. DNA Cell Biol. 16: 1249-1256.
- 3. Galliera, E., et al. 2004. β-Arrestin-dependent constitutive internalization of the human chemokine decoy receptor D6. J. Biol. Chem. 279: 25590-25597.
- 4. Martinez de la Torre, Y., et al. 2005. Increased inflammation in mice deficient for the chemokine decoy receptor D6. Eur. J. Immunol. 35: 1342-1346.
- 5. Jamieson, T., et al. 2005. The Chemokine Receptor D6 limits the inflammatory response in vivo. Nat. Immunol. 6: 403-411.
- 6. Comerford, I., et al. 2005. Post-translational control of chemokines: a role for decoy receptors? Immunol. Lett. 96: 163-174.

CHROMOSOMAL LOCATION

Genetic locus: ACKR2 (human) mapping to 3p22.1; Ackr2 (mouse) mapping to 9 F4.

SOURCE

Chemokine Receptor D6 (B-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 361-391 within a C-terminal cytoplasmic domain of Chemokine Receptor D6 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-365718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Chemokine Receptor D6 (B-12) is recommended for detection of Chemokine Receptor D6 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Chemokine Receptor D6 siRNA (h): sc-60337, Chemokine Receptor D6 siRNA (m): sc-60338, Chemokine Receptor D6 shRNA Plasmid (h): sc-60337-SH, Chemokine Receptor D6 shRNA Plasmid (m): sc-60338-SH, Chemokine Receptor D6 shRNA (h) Lentiviral Particles: sc-60337-V and Chemokine Receptor D6 shRNA (m) Lentiviral Particles: sc-60338-V.

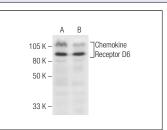
Molecular Weight of Chemokine Receptor D6: 43/90 kDa.

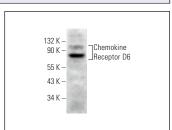
Positive Controls: M1 whole cell lysate: sc-364782, Jurkat whole cell lysate: sc-2204 or HEL 92.1.7 cell lysate: sc-2270.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG K BP-HRP: sc-516102 or m-IgG K 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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lqGk BP-FITC: sc-516140 or m-lqGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA





Chemokine Receptor D6 (B-12): sc-365718. Western blot analysis of Chemokine Receptor D6 expression in Jurkat (A) and HEL 92.1.7 (B) whole cell lysates

Chemokine Receptor D6 (B-12): sc-365718. Western blot analysis of Chemokine Receptor D6 expression in M1 whole cell lysate

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.