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 (β 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.

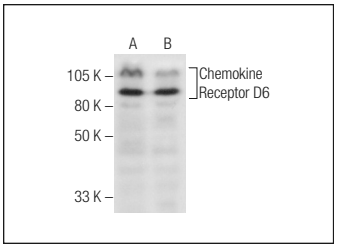
Molecular Weight of Chemokine Receptor D6: 43/90 kDa.

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

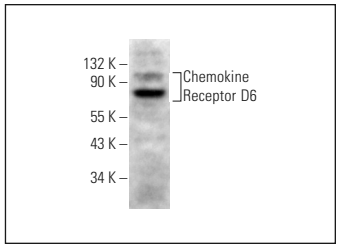
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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.