Chemokine Receptor D6 (V-18): sc-67476



The Power to Question

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., Wylie, S.M., Yang, J., Landau, N.R. and Graham, G.J. 1997. Cloning and characterization of a novel promiscuous human β -chemokine receptor D6. J. Biol. Chem. 272: 32078-32083.
- Bonini, J.A., Martin, S.K., Dralyuk, F., Roe, M.W., Philipson, L.H. and Steiner, D.F. 1997. Cloning, expression, and chromosomal mapping of a novel human C-C chemokine receptor (CCR-10) that displays high-affinity binding for MCP-1 and MCP-3. DNA Cell Biol. 16: 1249-1256.
- Galliera, E., Jala, V.R., Trent, J.O., Bonecchi, R., Signorelli, P., Lefkowitz, R.J., Mantovani, A., Locati, M. and Haribabu, B. 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., Locati, M., Buracchi, C., Dupor, J., Cook, D.N., Bonecchi, R., Nebuloni, M., Rukavina, D., Vago, L., Vecchi, A., Lira, S.A. and Mantovani, A. 2005. Increased inflammation in mice deficient for the chemokine decoy receptor D6. Eur. J. Immunol. 35: 1342-1346.
- Jamieson, T., Cook, D.N., Nibbs, R.J., Rot, A., Nixon, C., McLean, P., Alcami, A., Lira, S.A., Wiekowski, M. and Graham, G.J. 2005. The chemokine receptor D6 limits the inflammatory response *in vivo*. Nat. Immunol. 6: 403-411.
- 6. Comerford, I. and Nibbs, R.J. 2005. Posttranslational control of chemokines: a role for decoy receptors? Immunol. Lett. 96: 163-174.

CHROMOSOMAL LOCATION

Genetic locus: CCBP2 (human) mapping to 3p21.3; Ccbp2 (mouse) mapping to 9 F4.

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.

SOURCE

Chemokine Receptor D6 (V-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of Chemokine Receptor D6 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-67476 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Chemokine Receptor D6 (V-18) is recommended for detection of Chemokine Receptor D6 of mouse 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).

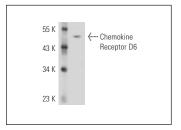
Suitable for use as control antibody for CCR-9 siRNA (m): sc-60338.

Molecular Weight of Chemokine Receptor D6: 43 kDa.

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



Chemokine Receptor D6 (V-18): sc-67476. Western blot analysis of Chemokine Receptor D6 expression in mouse brain tissue extract.

RESEARCH USE

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