

CXCR-4 (G-19): sc-6279



The Power to Question

BACKGROUND

The C-X-C or a chemokine family is characterized by a pair of cysteine residues separated by a single amino acid and primarily functions as chemoattractants for neutrophils. The C-X-C family includes IL-8, NAP-2, MSGA and stromal cell derived factor-1 (SDF-1). SDF-1 was originally described as a pre-B cell stimulatory factor, but has now been shown to function as a potent chemo-attractant for T cells and monocytes but not neutrophils. Receptors for the C-X-C family are G protein-coupled, seven pass transmembrane domain proteins which include IL-8RA, IL-8RB and CXCR-4 (also known as LESTR or fusin). CXCR-4 is highly homologous to the IL-8 receptors, sharing 37% sequence identity at the amino acid level. The IL-8 receptors bind to IL-8, NAP-2 and MSGA, while fusin binds to its cognate ligand, SDF-1. CXCR-4 has been identified as the major co-receptor for T-tropic HIV-1 and SDF-1 has been shown to inhibit HIV-1 infection.

CHROMOSOMAL LOCATION

Genetic locus: CXCR4 (human) mapping to 2q22.1; Cxcr4 (mouse) mapping to 1 E4.

SOURCE

CXCR-4 (G-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CXCR-4 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-6279 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CXCR-4 (G-19) is recommended for detection of CXCR-4 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).

CXCR-4 (G-19) is also recommended for detection of CXCR-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CXCR-4 siRNA (h): sc-35421, CXCR-4 siRNA (m): sc-35422, CXCR-4 shRNA Plasmid (h): sc-35421-SH, CXCR-4 shRNA Plasmid (m): sc-35422-SH, CXCR-4 shRNA (h) Lentiviral Particles: sc-35421-V and CXCR-4 shRNA (m) Lentiviral Particles: sc-35422-V.

Molecular Weight of CXCR-4: 40-47 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Jurkat whole cell lysate: sc-2204 or U-937 cell lysate: sc-2239.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SELECT PRODUCT CITATIONS

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RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.