



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Anti-Human CX3CR1 Polyclonal (EL)

Catalog Number: 11234

Lot Number: 2201-0203

Provided: 50 µg per vial of purified IgG in PBS containing 0.02% sodium azide.

Host: Rabbit anti-CX₃CR1 polyclonal antibody was raised against a peptide corresponding to amino acids 175 to 189 of human CX₃CR1 (1,2). The sequence is identical to that of rat CX₃CR1 and differs from that of mouse CX₃CR1 by one amino acid (3,4).

Description: CX₃CR1 is one of the chemokine receptors that are required as coreceptors for HIV infection. The genes encoding human, mouse, and rat CX₃CR1 were cloned and designated V28 and CMKBRL1, CX₃CR1, and RBS11, respectively, (1-4). The encoded seven transmembrane protein was recently identified as the receptor for a novel transmembrane molecule, fractalkine, and renamed CX₃CR1 (5). Recently, CX₃CR1 was found to serve as a coreceptor for HIV-1 and HIV-2 envelope fusion and virus infection, which can be inhibited by fractokine (6). CX₃CR1 mediates leukocyte migration and adhesion (5). CX₃CR1 is expressed in a variety of human tissues and cell lines (2).

Recommended Storage: Keep at 4°C for short term storage and -80°C for long term storage. Avoid freeze-thaw cycles as reagent degradation may result.

Contributor: ProSci, Incorporated

References:
Raport CJ, Schweickart VL, Eddy RL JR, Shows TB, Gray PW. The orphan G-protein-coupled receptor-encoding gene V28 is closely related to genes for chemokine receptors and is expressed in lymphoid and neural tissues. *Gene* 1995;**163**:295-9.
Combadiere C, Ahuja SK, Murphy PM. Cloning, chromosomal localization, and RNA expression of a human beta chemokine receptor-like gene. *DNA Cell Biol* 1995;**14**:673-80.
Combadiere C, Gao J, Tiffany HL, Murphy PM. Gene cloning, RNA distribution, and functional expression of mCX₃CR1, a mouse chemotactic receptor for the CX₃C chemokine fractalkine. *Biochem Biophys Res Commun* 1998;**253**:728-32.
Harrison JK, Barber CM, Lynch KR. cDNA cloning of a G-protein-coupled receptor expressed in rat spinal cord and brain related to chemokine receptors. *Neurosci Lett*

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

1994; **109**:85-9.

Imai T, Hieshima K, Haskell C, et al. Identification and molecular characterization of fractalkine receptor CX3CR1, which mediates both leukocyte migration and adhesion. *Cell* 1997; **91**:521-30>

Combadiere C, Salzwedel K, Smith ED, et al. Identification of CX3CR1. A chemotactic receptor for the human CX3C chemokine fractalkine and a fusion coreceptor for HIV-1. *J Biol Chem* 1998; **273**:23799-804.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS from ProSci Inc.: Anti-Human CX3CR1 Polyclonal (EL)". Also include the references cited above in any publications.

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