

Datasheet for ABIN2689042

anti-CXCR4 antibody





Overview

| Quantity: | 0.1 mg |
|--------------|--------------------------------------|
| Target: | CXCR4 |
| Reactivity: | Human |
| Host: | Rat |
| Clonality: | Monoclonal |
| Conjugate: | This CXCR4 antibody is un-conjugated |
| Application: | Flow Cytometry (FACS) |

Product Details

| Brand: | BD Pharmingen™ |
|------------------|---|
| Immunogen: | Human CXCR4 fusion protein |
| Clone: | 1D9 |
| Isotype: | IgG2a kappa |
| Characteristics: | The monoclonal antibody 1D9 reacts with the human CD184 which is also known as CXC chemokine receptor, CXCR4. CXCR4 (previously known as fusin, LESTR and HUMSTR), a seventransmembrane, G-protein-coupled receptor, is the specific receptor for CXC chemokines, SDF-1/CXCL12. CXCR4 was widely expressed by hematopoietic and non-hematopoietic cell types including PMN, monocytes, T cells, B cells, CD34+ progenitor cells, endothelial cells, neurons and astrocytes. The human CXCR4 is used by T-tropic HIV-1 as a co-receptor for viral entry. The |
| | human CXCR4 gene has been mapped to chromosome 2q21. The immunogen used to generate 1D9 hybridoma was human CXCR4 fusion protein. This antibody is routinely tested by |

flow cytometric analysis. Other applications were tested during antibody development only or reported in the literature. Detection of CXCR4 expression on human peripheral lymphocytes by purified 1D9. Human lysed whole blood were stained with 0.25 µg of purified 1D9 using 3-step staining protocol outlined below and anti-human CD4-FITC (Cat. No. 555346) The data reflects gating on lymphocytes, based on forward and side scattered light signals. The level of nonspecific staining was assessed by using purified rat IgG2a (Cat. No. 555841) as isotype control. The quadrant markers for the bivariate dot plots were set based on the isotype control. The samples were analyzed with a FACScan Flow Cytometer .

BD Pharmingen™ Purified Rat Anti-Human CD184 - Purified - Clone 1D9 - Isotype Rat IgG2a, κ - Reactivity Hu - 0.1 mg

Purification:

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

| Target: | CXCR4 |
|-------------------|--|
| Alternative Name: | CD184 (CXCR4 Products) |
| Background: | Synonyms: CXCR4, Fusin |
| Pathways: | Regulation of Cell Size, CXCR4-mediated Signaling Events |

Application Details

| Application Notes: | Optimal working dilution should be determined by the investigator. |
|--------------------|--|
| Restrictions: | For Research Use only |

Handling

| Concentration: | 0.5 mg/mL |
|--------------------|--|
| Buffer: | Aqueous buffered solution containing ≤0.09 % sodium azide. |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | 4°C |

Handling

Storage Comment:

Store undiluted at 4°C.

Publications

Product cited in:

Förster, Kremmer, Schubel, Breitfeld, Kleinschmidt, Nerl, Bernhardt, Lipp: "Intracellular and surface expression of the HIV-1 coreceptor CXCR4/fusin on various leukocyte subsets: rapid internalization and recycling upon activation." in: **Journal of immunology (Baltimore, Md.: 1950)**, Vol. 160, Issue 3, pp. 1522-31, (1998) (PubMed).

Hesselgesser, Halks-Miller, DelVecchio, Peiper, Hoxie, Kolson, Taub, Horuk: "CD4-independent association between HIV-1 gp120 and CXCR4: functional chemokine receptors are expressed in human neurons." in: **Current biology : CB**, Vol. 7, Issue 2, pp. 112-21, (1997) (PubMed).

Bleul, Farzan, Choe, Parolin, Clark-Lewis, Sodroski, Springer: "The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry." in: **Nature**, Vol. 382, Issue 6594, pp. 829-33, (1997) (PubMed).

Bleul, Wu, Hoxie, Springer, Mackay: "The HIV coreceptors CXCR4 and CCR5 are differentially expressed and regulated on human T lymphocytes." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 94, Issue 5, pp. 1925-30, (1997) (PubMed).

He, Chen, Farzan, Choe, Ohagen, Gartner, Busciglio, Yang, Hofmann, Newman, Mackay, Sodroski, Gabuzda: "CCR3 and CCR5 are co-receptors for HIV-1 infection of microglia." in: **Nature**, Vol. 385, Issue 6617, pp. 645-9, (1997) (PubMed).

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