

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Reacts specifically with human and non-human cells expressing human CXCR4 (fusin) as detected by flow cytometry. It will also react with cells expressing feline CXCR4 but not rat CXCR4. This antibody does not cross-react with other chemokine receptors. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 44717 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | 3T3 cells transfected with human CXCR4 |
| Conjugate | Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm |
| Formulation | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------|----------------------------------|--|
| Flow Cytometry | 0.25-1 µg/10 ⁶ cells | Jurkat human acute T cell leukemia cell line |

PREPARATION AND STORAGE

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| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

CXCR4, also known as CD184, is a G-protein-linked seven transmembrane spanning receptor that binds stromal cell-derived factor-1 (SDF-1). CXCR4 acts as a co-factor for T-cell tropic HIV-1 and -2 viral entry into cells. While primarily a membrane protein, CXCR4 undergoes trafficking and internalization in response to stimulation with phorbol esters and ligand (1). Cytoplasmic and nuclear localization of CXCR4 has been observed in colorectal and renal carcinomas (2,3) and it has been used as the basis of prognosis and metastatic state (3,4,5).

References:

1. Orsini, M.J. et al. (1999) *J. Biol. Chem.* **274**:31076.
2. Zagzag, D. et al. (2005) *Cancer Res.* **65**:6178.
3. Speetjens, F.M. et al. (2009) *Cancer Microenvironment* **2**:1.
4. Wang, L. et al. (2009) *Oncology Reports* **22**:1333.
5. Amara, S. et al. (2015) *Cancer Biomark.* **15**:869.

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