

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCR4. It will also react with cells expressing feline CXCR4 but not rat CXCR4.
Source	Monoclonal Mouse IgG _{2B} Clone # 44716
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	3T3 cells transfected with human CXCR4
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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

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 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:

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

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