

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXCR4 transfectants. Does not stain irrelevant transfectants.
Source	Recombinant Monoclonal Rat IgG _{2B} Clone # 247506R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Y3 rat myeloid cell line transfected with mouse CXCR4 Met1-Ser359 Accession # P70658
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. *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	Mouse thymocytes and HEK293 Human Cell Line Transfected with Mouse CXCR4 and eGFP

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.**

- 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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