**DESCRIPTION**

**Species Reactivity** Human/Mouse

**Specificity** Detects human and mouse CXCL12/SDF-1α and human CXCL12/SDF-1β.

**Source** Monoclonal Mouse IgG1, Clone # 79014

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen**
- E. coli-derived recombinant human CXCL12/SDF-1α
- Lys22-Lys89
- Accession # Q6ICW0

**Endotoxin Level** <0.10 EU per 1 μg of the antibody by the LAL method.

**Formulation** Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**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.

**Neutralization** Measured by its ability to neutralize CXCL12/SDF-1α-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR4. At 111 μg/mL, this antibody will neutralize > 50% of the chemotactic effect due to 2 ng/mL Recombinant Human/Feline/Rhesus Macaque CXCL12/SDF-1α.

**DATA**

**Neutralization** Chemotaxis Induced by CXCL12/SDF-1α and Neutralization by Human/Mouse CXCL12/SDF-1 Antibody, Recombinant Human/Feline/ Rhesus Macaque CXCL12/ SDF-1α (Catalog # 350-NS) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR4 in a dose-dependent manner (orange line). Chemotaxis elicited by Recombinant Human/Feline/ Rhesus Macaque CXCL12/ SDF-1α (2 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human/Mouse CXCL12/SDF-1 Monoclonal Antibody (Catalog # MAB310). At 111 μg/mL, this antibody will neutralize > 50% of the chemotactic effect.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

CXCL12, also known as SDF-1 (stromal cell-derived factor 1) and PBSF (Pro-B cell growth stimulatory factor), is a member of the CXC chemokine superfamily. Two alternatively spliced mRNAs encode CXCL12a (89 aa residues) and CXCL12b (93 aa residues) that differ by the addition of 4 amino acids at the carboxy-terminus. Human and mouse CXCL12 are highly conserved. Mature human and mouse CXCL12 differ only by 1 amino acid.