

Anti-CXCR4 [427aB1] Standard Size Ab02487-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: 427aB1

Alternative Name(s) of Target: C-X-C chemokine receptor type 4; CXCR4; CXCR-4; FB22; Fusin; FUSIN; LCR1; Leukocyte-derived seven transmembrane domain receptor; LESTR; Lipopolysaccharide-associated protein 3; LAP-3; LPS-associated protein 3; NPYRL; Stromal cell-derived factor 1 receptor; SDF-1 receptor; CD184

UniProt Accession Number of Target Protein: P61073

Published Application(s): functional assay, IP, WB, ELISA, FC

Published Species Reactivity: Human

Immunogen: The original mouse antibody was raised by immunizing balb/c mice with recombinant NIH3T3-CXCR4 cells and peptides corresponding to CXCR4 extracellular N-term and loops.

Specificity: This antibody is specific for human CXCR4. It binds to both the monomers and homodimers. CXCR4 is a receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation. Involved in the AKT signaling cascade. Plays a role in regulation of cell migration, e.g. during wound healing.

Application Notes: ELISA was preformed on N-terminal CXCR4 peptide conjugated to BSA with the mouse version of this antibody to demonstrate that the antibody binds to CXCR4 (WO2013017566). To determine the characteristics of this antibody, immunoprecipitation was preformed on NIH3T3-CXCR4 cells using the mouse version (WO2013017566). Western blot was also shown to work on proteins that were immunoprecipitated using the mouse version of this antibody (WO2013017566). NIH3T3, NIH3T3-hCXCR4 transfected cells, MDA-MB-231, HeLa, HT-29 and U937 cancer cell lines were used for flow cytometry using the mouse version of this antibody to characterize binding patterns of this clone (WO2013017566). To test the competition of binding to human CXCR4, the mouse version of this antibody and clone 515H7 were tested using flow cytometry on NIH3T3-hCXCR4 cells (WO2013017566). The influence of the mouse version of this antibody on the CXCR4 protein was tested using BRET analysis (WO2013017566).

Antibody First Published in: WO2013017566

[PMID:](#)

Note on publication: Describes the generation and characterization of this antibody.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.