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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Anti-CXCR4 [414H5] Bulk Size Ab04382-1.1-BT

Isotype and Format: Mouse IgG1, Kappa
Clone Number: 414H5
Alternative Name(s) of Target: CD184; CXC-R4; CXCR-4; FB22; LAP-3; Fusin; HM89; LCR1; LESTR 1; NPYRL; C-X-C chemokine receptor type 4; Leukocyte-derived seven transmembrane domain receptor; Lipopolysaccharide-associated protein 3; LPS-associated protein 3; Stromal cell-derived factor 1 receptor; SDF-1 receptor
UniProt Accession Number of Target Protein: P61073
Published Application(s): FACS, in vitro, in vivo, ELISA
Published Species Reactivity: Human
Immunogen: The original antibody was generated by immunizing Balb/C mice with recombinant NIH3T3-CXCR4 cells and/or peptides corresponding to CXCR4 extracellular N-term and loops.
Specificity: The antibody is specific for CXCR4.
Application Notes: The specificity of the antibody was confirmed by ELISA analysis. The original and the human chimeric formats of the antibody bound specifically to the human CXCR4-NIH3T3 transfected cell line but could not recognize the parent NIH3T3 cells by FACS analysis. The antibody's original format also recognized MDA-MB-231 breast cancer cells, U937 promyelocytic cancer cells, and Hela cervix cancer cells. The antibody's original and human chimeric formats competed for binding of SDF-1 to human CXCR4 receptor, expressed on CHO-K1 cells (% inhibition: 30±5% and 21±10% respectively). The original and human chimeric formats of the antibody could modulate the [35S]GTPγS binding at cellular membranes expressing CXCR4 receptor expressed on HeLa and NIH3T3/CXCR4 cell membranes (IC50 in NIH3T3/CXCR4 cells: 1.6 nM, 1.1 nM and in Hela cells 0.5 nM, 0.3 nM, respectively). Further, the antagonist potency was determined to be 51 nM in both cell lines. The original and human chimeric antibodies were able to modulate SDF-1-induced conformational changes for CXCR4 homo-dimers (63% and 75% inhibition, respectively) as well as for CXCR2/CXCR4 hetero-dimer formation (50% and 77% inhibition respectively). The antibody was also able to modulate CXCR4/CXCR4 and CXCR2/CXCR4 spatial proximity, respectively, indicating an influence on both CXCR4/CXCR4 homo and CXCR2/CXCR4 hetero-dimer conformation. A functional assay was designed to monitor CXCR4 receptor signaling at the level of adenylate cyclases via inhibitory Gi/o proteins. The original format of the antibody inhibited the forskolin-stimulated effect of SDF-1 by more than 60%, while the human chimeric inhibited it by 63%. The modulation of [35S]GTPγS binding at cellular membranes expressing constitutively active mutant Asn119Ser CXCR4 receptor showed the antibody behaved as silent antagonists at CAM CXCR4, without altering basal [35S]GTPγS binding but inhibiting SDF-1 induced [35S]GTPγS binding. The antibody's original and human chimeric formats had an

effect on SDF-1-induced U937 cell migration; the cell migration decreased by 50% in both cases. The ability of the antibody to inhibit the growth of MDB-MB-231 xenograft in Nod/Scid mice was evaluated; the antibody showed a significant inhibition of tumor growth (82% compared to the control). The activity of the antibody's original and human chimeric formats was evaluated in a U937 mouse survival model, showing that mice treated with the antibodies had a significant increase in life span (US8557964B2).
Antibody First Published in: PMID:
Note on publication:

Product Form

Size: 1 mg Purified antibody in bulk size.
Purification: Protein A affinity purified
Supplied In: PBS only.
Storage Recommendation: Store at 4^{0}C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommed this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20^{0}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.