

Rabbit CXCR4 Polyclonal Antibody | anti-CXCR4 antibody

CXCR4 (Ser-324/Ser-325), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71615	Rabbit	Human, Rat, Mouse, Chicken	Immunohistochemistry, Immunocytochemistry, ELISA, Western Blot

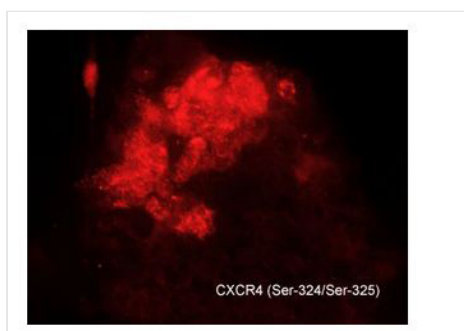
PRODUCT SYNONYMS

CXCR4; Polyclonal Antibody; CXCR4 (Ser-324/Ser-325); phospho-specific Antibody; phospho-specific; CXCR4 Ser324; anti-CXCR4 antibody

PRODUCT SPECIFICATIONS

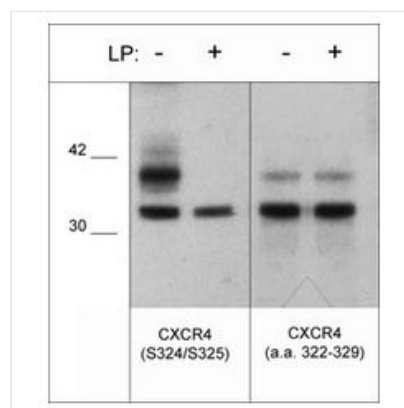
Host	Rabbit
Reactivity	Human, Rat, Mouse, Chicken
Clonality	Polyclonal
Specificity	The antibody detects bands at 35, 42, 50, and 100kDa* corresponding to various post-translationally modified forms of CXCR4 on SDS-PAGE immunoblots of human Jurkat and PC3 cells stimulated with calyculin A. These bands co-migrate with similar bands detected with anti-CXCR4 (a.a. 322-329) and anti-CXCR4 (a.a. 328-338) antibodies.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-CXCR4 antibody	IHC (Immunohistochemistry), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-CXCR4 (Ser-324/Ser-325) synthetic peptide (coupled to carrier protein) corresponds to amino acids surrounding Ser-324 and Ser-325 in the C-terminal region of human CXCR4. This sequence is conserved in mouse, rat, and chicken CXCR4, but has low homology to other CXCR family members.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of CXCR4 in chick pluripotent cells. The cells were labeled with rabbit polyclonal CXCR4 (S324/S325) antibody (CP4251), then detected using appropriate secondary antibody (Red). (Image provided by Dr. Yangqing Lu at the Regenerative Bioscience Center, University of Georgia).



WB (Western Blot)

Western blot analysis of human Jurkat cells treated with 100nM calyculin A for 30 min. then the blots were untreated (-) or treated (+) with lambda phosphatase. The blots were probed with rabbit polyclonals anti-CXCR4 (Ser-324/Ser-325) (left panel) or anti-CXCR4 (a.a. 322-329) (right panel).

ADDITIONAL INFORMATION

Related Product Information for anti-CXCR4 antibody	The chemokine receptor CXCR4 is a widely expressed G protein-coupled receptor required for development, hematopoiesis, organogenesis, and vascularization. In disease, CXCR4 has been implicated in WHIM syndrome, HIV, and cancers. Regulation of CXCR4 function occurs through phosphorylation at multiple sites in the C-terminal region. These sites have been shown to be phosphorylated after CXCL12 stimulation, and involve several kinases, such as PKC and GRK kinases. After CXCL12 stimulation of HEK293 cells, Ser-324 and Ser-325 become phosphorylated by PKC and GRK6, while Ser-330 and Ser-339 are phosphorylated by only GRK6. In human astroglia cells, Ser-324 and Ser-325 are rapidly phosphorylated in endogenous CXCR4, while Ser-330 was phosphorylated with slower kinetics. In addition, arrestin binding to CXCR4 is driven by this phosphorylation of far C-terminal residues. Thus, site-specific phosphorylation of CXCR4 may be regulated by multiple kinases leading to complex regulation of CXCR4 signaling.
References	Busillo, J. M. et al. (2010) J Biol Chem. 285(10):7805. Bhandari, D. et al. (2009) Mol Biol Cell. 20:1324. Orsini, M.J. et al. (2000) J Biol Chem. 275(33):25876. Orsini, M.J. et al. (1999) J Biol Chem. 274(43):31076

NCBI AND UNIPROT INFORMATION

NCBI GI #	56790927
NCBI GeneID	7852
NCBI Accession #	NP_001008540.1
NCBI GenBank Nucleotide #	NM_001008540.1
UniProt Accession #	P61073; O60835; P30991; P56438; Q53S69; Q9BXA0; Q9UKN2; B2R5N0
Molecular Weight	39,746 Da
NCBI Official Full Name	C-X-C chemokine receptor type 4 isoform a
NCBI Official Synonym Full Names	chemokine (C-X-C motif) receptor 4
NCBI Official Symbol	CXCR4
NCBI Official Synonym Symbols	FB22; HM89; LAP3; LCR1; NPYR; WHIM; CD184; LESTR; NPY3R; NPYRL; HSY3RR; NPYY3R; D2S201E
NCBI Protein Information	C-X-C chemokine receptor type 4; fusin; CXC-R4; CXCR-4; CD184 antigen; SDF-1 receptor; neuropeptide Y receptor Y3; seven transmembrane helix receptor; stromal cell-derived factor 1 receptor; lipopolysaccharide-associated protein 3; seven-transmembrane-seg
UniProt Protein Name	C-X-C chemokine receptor type 4
UniProt Gene Name	CXCR4
UniProt Synonym Gene Names	CXC-R4; CXCR-4; LESTR
UniProt Entry Name	CXCR4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.