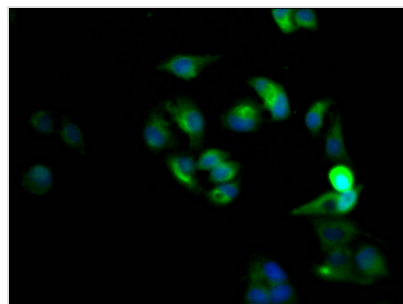




CXCR4 Antibody

Product Code	CSB-RA569311A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P61073
Immunogen	A synthesized peptide derived from human CXCR4
Species Reactivity	Human
Tested Applications	ELISA, IF; Recommended dilution: IF:1:20-1:200
Relevance	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. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. Involved in hematopoiesis and in cardiac ventricular septum formation. Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells. Involved in cerebellar development. In the CNS, could mediate hippocampal-neuron survival.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Cancer; Immunology; Metabolism; Microbiology; Stem cells
Gene Names	CXCR4
Accession NO.	2F10

Image



Immunofluorescence staining of HeLa Cells with CSB-RA569311A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Description

CXCR4 is a pleiotropic chemokine receptor involved in immune response, hematopoiesis, development, and pro-tumorigenesis. The interaction between CXCR4 with CXCL12 activates a number of extracellular and intracellular signaling pathways, including PI3K-Akt, MAPK, JUK, JAK/STAT, ERK1/2, and Ras/Raf, which all play a role in cell differentiation, survival, migration, proliferation, and chemotaxis. CXCR4 is also regarded as a cancer biomarker with independent prognostic value. Its expression has been linked to a variety of human malignancies, including gastric, liver, and breast cancers. CXCR4 signaling also promotes tumor survival, development, and invasion.

The recombinant CXCR4 antibody was produced by cloning antibody genes into an expression vectors, which were subsequently introduced into mammalian cells to provide animal-free antibody production. This CXCR4 antibody has been validated in ELISA, IF. It has the features of improved affinity, stability, and consistency between different batches.