Datasheet for ABIN7043038

anti-CXCR2 antibody (Extracellular)

2 Images

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Overview

Quantity:	50 µL
Target:	CXCR2
Binding Specificity:	AA 2-19, Extracellular
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CXCR2 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to CXCR2 Chemokine Receptor
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)EDFNMESDSFEDFWKGED, corresponding to amino acid residues 2-19 of human CXCR2
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity (Details):	Will only recognize CXCR2 from human samples.
Predicted Reactivity:	Human only
Characteristics:	Anti-Human CXCR2 (extracellular) Antibody (ABIN7043038, ABIN7044164 and ABIN7044165) is a highly specific antibody directed against an extracellular epitope located at the N-terminus of

Product Details

	human CXCR2. The antibody can be used in western blot and indirect flow cytometry applications, and has been designed to recognize CXCR2 from human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	CXCR2
Alternative Name:	CXCR2 (CXCR2 Products)
Background:	C-X-C chemokine receptor type 2, Interleukin-8 receptor B, IL-8R B, IL8RB, IL-8 receptor type 2, CD182,Chemokines (CHEMOtactic cytoKINES) are an important subgroup of the inflammatory cytokine family. More than fifty chemokines are expressed in mammalian cells and are characterized by their relatively small size (~70-90 amino acids), their conserved N-terminus and cysteine motifs. This group of proteins has been further categorized on the basis of the cysteine spacing in the motifs creating C, CC, CXC, and CX3C chemokine subfamilies1,2.All fifty chemokines exert their effects through twenty different chemokine receptors, belonging to the superfamily of G-protein coupled receptors (GPCRs) suggesting a certain level of promiscuity among the different receptors. All chemokine receptors couple to the pertussis sensitive Gi protein leading to phospholipase C activation and adenylate cyclase inhibition3.Chemokines were first identified by their ability to mediate leukocyte chemoattraction. Apart from regulating the migration of leukocytes, they seem to be major players during inflammation and immunity4-6. Indeed, chemokines could also be further classified as being inflammatory, as many chemokines are extensively upregulated in response to inflammation, or housekeeping important for the homeostasis of certain cell types. Inflammatory chemokines are responsible for recruiting immune cells to the inflamed region, and housekeeping chemokines, expressed in lymphoid or non-lymphoid tissues mediate the trafficking and targeting of cells7,8.In general, chemokines and their receptors guide leukocytes to sites of infection/inflammation. However, cases of chronic inflammatory disease and tissue damage occur when there is excessive recruitment of leukocytes. They could also be involved in the pathogenesis of neurological diseases like multiple sclerosis and many inflammatory diseases like atherosclerosis and inflammatory bowel disease. Recently, chemokines and their receptors have been found to be involved in cancer metastasis, namely breast cancer1. The chemokine signaling also seems to be important for the communication between neural cells and the immune system, especially in the context of infection.The CXCR2 receptor could mediate chemotaxis and degranulation of neutrophils along with CXCR1 via interleukin-8 (IL-8), a proinflammatory chemokine with the CXC motif9. In addition, in a model of arterial injury, CXCR2 can improve endothelial recovery,

Target Details

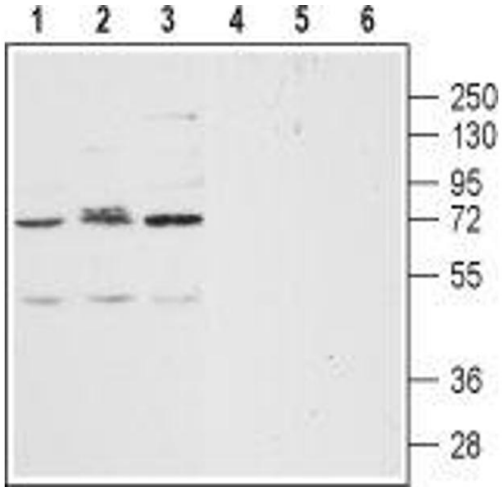
	and also seems to be important in recruiting endothelial progenitor cells to injured vessels10. CXCR2 is activated by a plethora of ligands: GROa, b, g, neutrophil-activating peptide, granulocyte chemotactic protein-2 and keratinocyte derived chemokine (CXCL1). CXCR2 is expressed in different brain regions11, in the lung and spleen12 and other regions. Alternative names: CXCR2, C-X-C chemokine receptor type 2, Interleukin-8 receptor B, IL-8R B, IL8RB, IL-8 receptor type 2, CD182
Gene ID:	3579
NCBI Accession:	NM_001557
UniProt:	P25025
Pathways:	cAMP Metabolic Process

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Restrictions:	For Research Use only

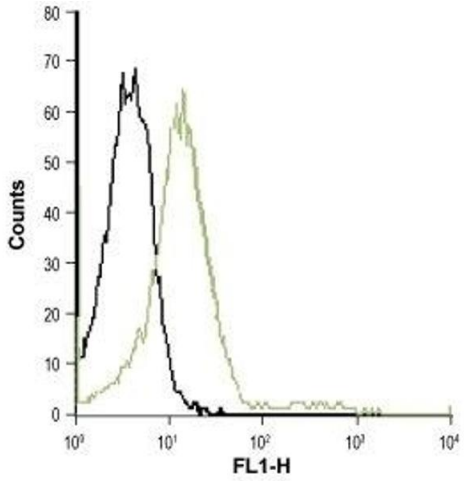
Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Western Blotting

Image 1. Western blot analysis of human Jurkat acute T cell leukemia (lanes 1 and 4), human SH-SY5Y brain neuroblastoma (lanes 2 and 5) and human THP-1acute monocytic leukemia (lanes 3 and 6) lysates: - 1-3. Anti-Human CXCR2 (extracellular) Antibody (ABIN7043038, ABIN7044164 and ABIN7044165), (1:200).4-6. Anti-Human CXCR2 (extracellular) Antibody, preincubated with Human CXCR2 (extracellular) Blocking Peptide (#BLP-CR012).



Flow Cytometry

Image 2. Cell surface detection of CXCR2 in live intact Jurkat cells: (black line) Unstained cells. (green line) Cells + Anti-Human CXCR2 (extracellular) Antibody (ABIN7043038, ABIN7044164 and ABIN7044165), (5-10 µg/5x10^5 cells).