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CX3CL1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22248c

Product Information

Application	WB, FC, E
Primary Accession	P78423
Reactivity	Human
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56920
Calculated MW	42203

Additional Information

Gene ID	6376
Other Names	Fractalkine, C-X3-C motif chemokine 1, CX3C membrane-anchored chemokine, Neurotactin, Small-inducible cytokine D1, Processed fractalkine, CX3CL1, FKN, NTT, SCYD1
Target/Specificity	This CX3CL1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 272-306 amino acids from the Central region of human CX3CL1.
Dilution	WB~~1:1000-1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CX3CL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CX3CL1 {ECO:0000303|PubMed:9024663}
Function	Chemokine that acts as a ligand for both CX3CR1 and integrins ITGAV:ITGB3 and ITGA4:ITGB1 (PubMed:12055230, PubMed:21829356, PubMed:23125415, PubMed:9782118, PubMed:9931005). The CX3CR1-CX3CL1 signaling exerts

	distinct functions in different tissue compartments, such as immune response, inflammation, cell adhesion and chemotaxis (PubMed:12055230, PubMed:9024663, PubMed:9177350, PubMed:9782118). Regulates leukocyte adhesion and migration processes at the endothelium (PubMed:9024663, PubMed:9177350). Can activate integrins in both a CX3CR1-dependent and CX3CR1-independent manner (PubMed:23125415, PubMed:24789099). In the presence of CX3CR1, activates integrins by binding to the classical ligand-binding site (site 1) in integrins (PubMed:23125415, PubMed:24789099). In the absence of CX3CR1, binds to a second site (site 2) in integrins which is distinct from site 1 and enhances the binding of other integrin ligands to site 1 (PubMed:23125415, PubMed:24789099).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed in the seminal plasma, endometrial fluid and follicular fluid (at protein level). Small intestine, colon, testis, prostate, heart, brain, lung, skeletal muscle, kidney and pancreas. Most abundant in the brain and heart

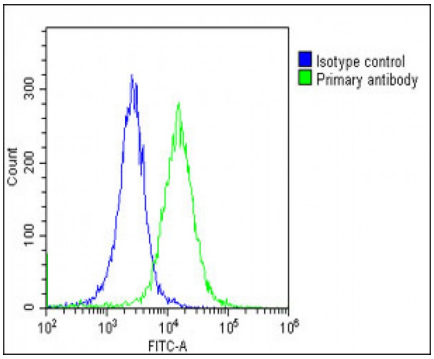
Background

The soluble form is chemotactic for T-cells and monocytes, but not for neutrophils. The membrane-bound form promotes adhesion of those leukocytes to endothelial cells. May play a role in regulating leukocyte adhesion and migration processes at the endothelium. Binds to CX3CR1.

References

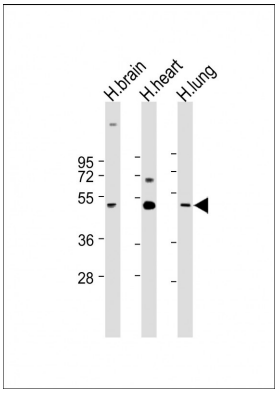
Bazan J.F.,et al.Nature 385:640-644(1997).
Loftus B.J.,et al.Genomics 60:295-308(1999).
Nilsson J.,et al.Nat. Methods 6:809-811(2009).
Halim A.,et al.Mol. Cell. Proteomics 0:0-0(2011).
Mizoue L.S.,et al.Biochemistry 38:1402-1414(1999).

Images



Overlay histogram showing HeLa cells stained with AP22248c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22248c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

All lanes : Anti-CX3CL1 Antibody (Center) at 1:1000-1:2000 dilution Lane 1: Human brain lysate Lane 2: Human heart lysate Lane 3: Human lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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