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Fractalkine Receptor Polyclonal Antibody

Catalog # AP73295

Product Information

Application	WB, IHC-P
Primary Accession	P49238
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40396

Additional Information

Gene ID	1524
Other Names	CX3CR1; CMKBRL1; GPR13; CX3C chemokine receptor 1; C-X3-C CKR-1; CX3CR1; Beta chemokine receptor-like 1; CMK-BRL-1; CMK-BRL1; Fractalkine receptor; G-protein coupled receptor 13; V28
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	CX3CR1 {ECO:0000303|PubMed:12551893, ECO:0000312|HGNC:HGNC:2558}
Function	Receptor for the C-X3-C chemokine fractalkine (CX3CL1) present on many early leukocyte cells; CX3CR1-CX3CL1 signaling exerts distinct functions in different tissue compartments, such as immune response, inflammation, cell adhesion and chemotaxis (PubMed:12055230, PubMed:23125415, PubMed:9390561, PubMed:9782118). CX3CR1-CX3CL1 signaling mediates cell migratory functions (By similarity). Responsible for the recruitment of natural killer (NK) cells to inflamed tissues (By similarity). Acts as a regulator of inflammation process leading to atherogenesis by mediating macrophage and monocyte recruitment to inflamed atherosclerotic plaques, promoting cell survival (By similarity). Involved in airway inflammation by promoting interleukin 2-producing T helper (Th2) cell survival in inflamed lung (By similarity). Involved in the migration of circulating monocytes to non-inflamed tissues, where they differentiate into macrophages and dendritic cells (By similarity). Acts as a negative regulator of angiogenesis, probably by promoting macrophage chemotaxis (PubMed:14581400, PubMed:18971423).

Plays a key role in brain microglia by regulating inflammatory response in the central nervous system (CNS) and regulating synapse maturation (By similarity). Required to restrain the microglial inflammatory response in the CNS and the resulting parenchymal damage in response to pathological stimuli (By similarity). Involved in brain development by participating in synaptic pruning, a natural process during which brain microglia eliminates extra synapses during postnatal development (By similarity). Synaptic pruning by microglia is required to promote the maturation of circuit connectivity during brain development (By similarity). Acts as an important regulator of the gut microbiota by controlling immunity to intestinal bacteria and fungi (By similarity). Expressed in lamina propria dendritic cells in the small intestine, which form transepithelial dendrites capable of taking up bacteria in order to provide defense against pathogenic bacteria (By similarity). Required to initiate innate and adaptive immune responses against dissemination of commensal fungi (mycobiota) component of the gut: expressed in mononuclear phagocytes (MNPs) and acts by promoting induction of antifungal IgG antibodies response to confer protection against disseminated C.albicans or C.auris infection (PubMed:29326275). Also acts as a receptor for C-C motif chemokine CCL26, inducing cell chemotaxis (PubMed:20974991).

Cellular Location

Cell membrane; Multi-pass membrane protein

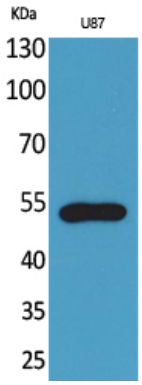
Tissue Location

Expressed in lymphoid and neural tissues (PubMed:7590284). Expressed in lymphocyte subsets, such as natural killer (NK) cells, gamma-delta T-cells and terminally differentiated CD8(+) T-cells (PubMed:12055230). Expressed in smooth muscle cells in atherosclerotic plaques (PubMed:14581400)

Background

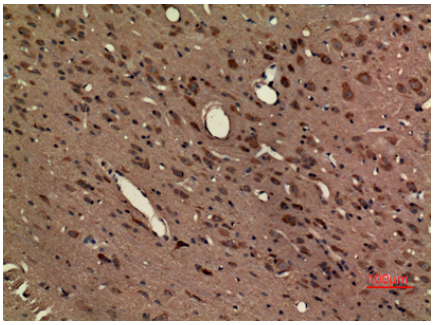
Receptor for the CX3C chemokine fractalkine (CX3CL1); binds to CX3CL1 and mediates both its adhesive and migratory functions (PubMed:9390561, PubMed:23125415). Acts as coreceptor with CD4 for HIV-1 virus envelope protein (in vitro) (PubMed:9726990). Isoform 2 and isoform 3 seem to be more potent HIV-1 coreceptors than isoform 1 (PubMed:14607932).

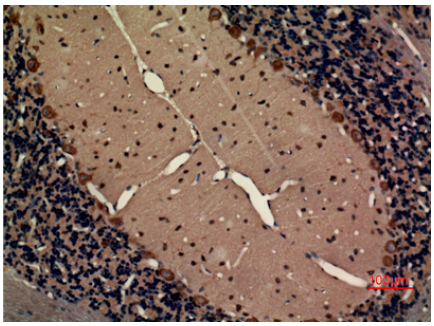
Images



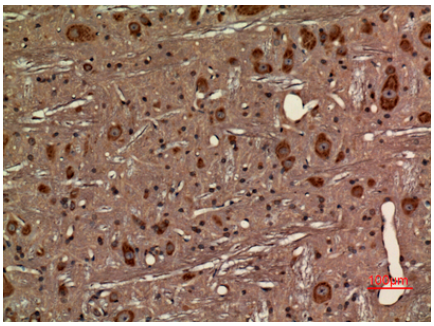
Western Blot analysis of U87 cells using Fractalkine Receptor Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100





Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100