

CX3CR1/RBS11 Antibody Rabbit Polyclonal Antibody Catalog # ABV10988

### **Specification**

# CX3CR1/RBS11 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P35411</u> <u>NP\_598218.1</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 40327

## CX3CR1/RBS11 Antibody - Additional Information

Gene ID 171056

Application & Usage

Western blotting (0.5-4  $\mu$ g/ml). However, the optimal concentrations should be determined individually. Blocking peptide is available separately

**Other Names** CX3CR1, C-X-C chemokine receptor type 3, C-X-C chemokine receptor type-3, CXCR-3, CXCR3, CXCR 3, Interferon-inducible protein 10 receptor, RBS111

Target/Specificity CX3CR1/RBS11

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** 100  $\mu$ g (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

Precautions



CX3CR1/RBS11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# CX3CR1/RBS11 Antibody - Protein Information

## Name Cx3cr1 {ECO:0000250|UniProtKB:P49238}

### 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. CX3CR1-CX3CL1 signaling mediates cell migratory functions. Responsible for the recruitment of natural killer (NK) cells to inflamed tissues. Acts as a regulator of inflammation process leading to atherogenesis by mediating macrophage and monocyte recruitment to inflamed atherosclerotic plagues, promoting cell survival. Involved in airway inflammation by promoting interleukin 2-producing T helper (Th2) cell survival in inflamed lung. Involved in the migration of circulating monocytes to non-inflamed tissues, where they differentiate into macrophages and dendritic cells. Acts as a negative regulator of angiogenesis, probably by promoting macrophage chemotaxis. Plays a key role in brain microglia by regulating inflammatory response in the central nervous system (CNS) and regulating synapse maturation. Required to restrain the microglial inflammatory response in the CNS and the resulting parenchymal damage in response to pathological stimuli. Involved in brain development by participating in synaptic pruning, a natural process during which brain microglia eliminates extra synapses during postnatal development. Synaptic pruning by microglia is required to promote the maturation of circuit connectivity during brain development. Acts as an important regulator of the gut microbiota by controlling immunity to intestinal bacteria and fungi. 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. 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 (By similarity). Also acts as a receptor for C-C motif chemokine CCL26, inducing cell chemotaxis (By similarity).

### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P49238}; Multi-pass membrane protein

#### **Tissue Location**

Most abundant in adult spinal cord, brain, kidney, gut, uterus and testes.

### CX3CR1/RBS11 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### CX3CR1/RBS11 Antibody - Images



# CX3CR1/RBS11 Antibody - Background

Human CX3CR1 has been shown to mediate both the adhesive and migratory functions of fractalkine. Fractalkine and CX3CR1 represent new types of leukocyte trafficking regulators.