

## CX3CR1/RBS11 Blocking Peptide

Catalog # PBV10489b

# **Specification**

## CX3CR1/RBS11 Blocking Peptide - Product Information

 Primary Accession
 P35411

 Other Accession
 NP\_598218.1

 Gene ID
 171056

 Calculated MW
 40327

## CX3CR1/RBS11 Blocking Peptide - Additional Information

Gene ID 171056

Application & Usage The peptide is used for blocking the

antibody activity of CX3CR1. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for

30-60 minutes at 37°C.

#### **Other Names**

CX3C chemokine receptor 1, C-X3-C CKR-1, CX3CR1, Fractalkine receptor, RBS11, Cx3cr1, Rbs11

# Target/Specificity CX3CR1/RBS11

# Formulation

 $50~\mu g$  (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

# Reconstitution & Storage -20 °C

# **Background Descriptions**

### **Precautions**

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

#### CX3CR1/RBS11 Blocking Peptide - 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 Blocking Peptide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# CX3CR1/RBS11 Blocking Peptide - Images