

## SLAMF7 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP5683c

## **Specification**

## **SLAMF7 Antibody (Center) Blocking peptide - Product Information**

Primary Accession <u>Q9NQ25</u> Other Accession <u>NP 067004.3</u>

## SLAMF7 Antibody (Center) Blocking peptide - Additional Information

Gene ID 57823

#### **Other Names**

SLAM family member 7, CD2 subset 1, CD2-like receptor-activating cytotoxic cells, CRACC, Membrane protein FOAP-12, Novel Ly9, Protein 19A, CD319, SLAMF7, CS1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# SLAMF7 Antibody (Center) Blocking peptide - Protein Information

Name SLAMF7

Synonyms CS1

## **Function**

Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Isoform 1 mediates NK cell activation through a SH2D1A-independent extracellular signal-regulated ERK-mediated pathway (PubMed:<a

href="http://www.uniprot.org/citations/11698418" target="\_blank">11698418</a>). Positively regulates NK cell functions by a mechanism dependent on phosphorylated SH2D1B. Downstream signaling implicates PLCG1, PLCG2 and PI3K (PubMed:<a

href="http://www.uniprot.org/citations/16339536" target="\_blank">16339536</a>). In addition to heterotypic NK cells-target cells interactions also homotypic interactions between NK cells may contribute to activation. However, in the absence of SH2D1B, inhibits NK cell function. Acts also inhibitory in T-cells (By similarity). May play a role in lymphocyte adhesion (PubMed:<a



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href="http://www.uniprot.org/citations/11802771" target=" blank">11802771</a>). In LPS-activated monocytes negatively regulates production of pro-inflammatory cytokines (PubMed: <a href="http://www.uniprot.org/citations/23695528" target="blank">23695528</a>).

## **Cellular Location**

Membrane; Single-pass type I membrane protein.

#### **Tissue Location**

Expressed in spleen, lymph node, peripheral blood leukocytes, bone marrow, small intestine, stomach, appendix, lung and trachea. Expression was detected in NK cells, activated B-cells, NKcell line but not in promyelocytic, B-, or T-cell lines. Expressed in monocytes. Isoform 3 is expressed at much lower level than isoform 1

## **SLAMF7 Antibody (Center) Blocking peptide - Protocols**

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

### Blocking Peptides

SLAMF7 Antibody (Center) Blocking peptide - Images

## SLAMF7 Antibody (Center) Blocking peptide - Background

SLAMF7 contains one Ig-like C2-type (immunoglobulin-like) domain. Isoform 1 mediates NK cell activation through a SAP-independent extracellular signal-regulated ERK-mediated pathway. It may play a role in lymphocyte adhesion. Isoform 3 does not mediate any activation. SAP can bind the cytoplasmic tail of isoform 1 when phosphorylated in the presence of Fyn (in vitro). SLAMF7 is expressed in spleen, lymph node, peripheral blood leukocytes, bone marrow, small intestine, stomach, appendix, lung and trachea. Expression was detected in NK cells, activated B-cells, NK-cell line but not in promyelocytic, B-, or T-cell lines. The isoform 3 is expressed at much lower level than isoform 1. There are three named isoforms.

## SLAMF7 Antibody (Center) Blocking peptide - References

Tovar, V., et al. Immunogenetics 54(6):394-402(2002)Murphy, J.J., et al. Biochem. J. 361 (PT 3), 431-436 (2002) Bouchon, A., et al. J. Immunol. 167(10):5517-5521(2001)Boles, K.S., et al. Immunogenetics 52 (3-4), 302-307 (2001)