

SLAMF7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5683C

Specification

SLAMF7 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>Q9NQ25</u>
Other Accession	<u>NP_067004.3</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37421
Antigen Region	58-85

SLAMF7 Antibody (Center) - 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

Target/Specificity

This SLAMF7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-85 amino acids from the Central region of human SLAMF7.

Dilution WB~~1:1000 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

SLAMF7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SLAMF7 Antibody (Center) - 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:<u>11698418</u>). Positively regulates NK cell functions by a mechanism dependent on phosphorylated SH2D1B. Downstream signaling implicates PLCG1, PLCG2 and PI3K (PubMed:<u>16339536</u>). 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. Also acts inhibitory in T-cells (By similarity). May play a role in lymphocyte adhesion (PubMed:<u>11802771</u>). In LPS-activated monocytes negatively regulates production of pro-inflammatory cytokines (PubMed:<u>23695528</u>).

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, NK-cell 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) - Protocols

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

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

SLAMF7 Antibody (Center) - Images





SLAMF7 Antibody (Center) (Cat. #AP5683c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the SLAMF7 antibody detected the SLAMF7 protein (arrow).

SLAMF7 Antibody (Center) - 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) - 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)