



Rabbit Anti-SH2D1A/FITC Conjugated antibody

SL9873R-FITC

Product Name:	Anti-SH2D1A/FITC
Chinese Name:	FITC标记的信号传导Tlymphocyte活化相关蛋白抗体
Alias:	SH2 domain protein 1A; DSHP; Duncan disease SH2 protein; SAP; Signaling lymphocyte activation molecule associated protein; SLAM associated protein; T cell signal transduction molecule SAP; SH21A HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SH2D1A/SAP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail:	background: SH2D1A, also SH2 domain protein 1A, SAP and CD150/SLAM (signaling lymphocyte activation molecule)-associated protein, influences signaling pathways involving SLAM molecules at the interface between T and B cells. SH2D1A modulates SLAM by blocking the recruitment of tyrosine phosphatase SHP2 to the phosphorylated cytoplasmic domain of SLAM. SLAM activation mediates expansion of activated T cells during immune responses, induces production of interferon- γ and changes the functional profile of subsets of T cells. SH2D1A is a hydrophilic, 128 amino acid

protein that is 96% homologous to the mouse protein in both SH2 and tail domains. SH2D1A is present in all major subsets of T cells, including CD4+, CD45RO+, CD45RA+ and CD8+, but not in B cells. SH2D1A can interact via an SH2 domain with a motif (TIYXXV) present in the cytoplasmic tail of cell-surface receptors SLAM (CD150), CD84, CD229 (LY9) and CD244 (2B4).

Function:

Inhibitor of the SLAM self-association. Acts by blocking recruitment of the SH2-domain-containing signal-transduction molecule SHP-2 to a docking site in the SLAM cytoplasmic region. Mediates interaction between FYN and SLAMF1. May also regulate the activity of the neurotrophin receptors NTRK1, NTRK2 and NTRK3.

Subunit:

Interacts with NTRK1, NTRK2 and NTRK3 (By similarity). Interacts with CD84, CD244, LY9, SLAMF1 and FYN.

Subcellular Location:

Cytoplasmic

Tissue Specificity:

Expressed at a high level in thymus and lung, with a lower level of expression in spleen and liver. Expressed in peripheral blood leukocytes, including T lymphocytes. Tends to be expressed at lower levels in peripheral blood leukocytes in patients with rheumatoid arthritis.

DISEASE:

Defects in SH2D1A are a cause of lymphoproliferative syndrome X-linked type 1 (XLP1) [MIM:308240]; also known as X-linked lymphoproliferative disease (XLPD) or Duncan disease. XLP is a rare immunodeficiency characterized by extreme susceptibility to infection with Epstein-Barr virus (EBV). Symptoms include severe or fatal mononucleosis, acquired hypogammaglobulinemia, pancytopenia and malignant lymphoma.

Similarity:

Contains 1 SH2 domain.

Database links:

[Entrez Gene: 4068](#)Human

[Entrez Gene: 20400](#)Mouse

[Entrez Gene: 501502](#)Rat

[Oimim: 300490](#)Human

[SwissProt: O60880](#)Human

[SwissProt: O88890](#)Mouse

[SwissProt: B2RZ59](#)Rat

[Unigene: 349094](#)Human

[Unigene: 441197](#)Mouse

[Unigene: 12605](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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