

Rabbit Anti-SH2D1A antibody

SL9873R

Product Name:	SH2D1A
Chinese Name:	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:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-
	200 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SH2D1A/SAP:1-100/128
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 癈 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癈. 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 癈.
PubMed:	PubMed
Product Detail:	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-?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.

SWISS:

O60880

Gene ID:

4068

Database links:

Entrez Gene: 4068Human

Entrez Gene: 20400 Mouse

Entrez Gene: 501502Rat

Omim: 300490Human

SwissProt: O60880Human

SwissProt: O88890Mouse

SwissProt: B2RZ59Rat

Unigene: 349094Human

Unigene: 441197 Mouse

Unigene: 12605Rat

Important Note:

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