

Rabbit Anti-SH2D1A/Biotin Conjugated antibody

SL9873R-Bio

Product Name Anti-SH2D1A/Biotin

Chinese Name 生物素标记的信号传导 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.

Research Area Cardiovascular immunology Signal transduction

Immunogen Species Rabbit

Clonality Polyclonal

React Species (predicted:Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,Sheep)

WB=1000-10000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:500-5000

Applications 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 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Store at -20 癆 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 癆. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 癆.

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

[Omid: 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.