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SPN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9623c

Product Information

Application	WB, E
Primary Accession	P16150
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23613
Calculated MW	40322
Antigen Region	226-253

Additional Information

Gene ID	6693
Other Names	Leukosialin, Galactoglycoprotein, GALGP, Leukocyte sialoglycoprotein, Sialophorin, CD43, SPN, CD43
Target/Specificity	This SPN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 226-253 amino acids from the Central region of human SPN.
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	SPN Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPN
Synonyms	CD43
Function	Predominant cell surface sialoprotein of leukocytes which regulates multiple T-cell functions, including T-cell activation, proliferation,

	differentiation, trafficking and migration. Positively regulates T-cell trafficking to lymph-nodes via its association with ERM proteins (EZR, RDX and MSN) (By similarity). Negatively regulates Th2 cell differentiation and predisposes the differentiation of T-cells towards a Th1 lineage commitment. Promotes the expression of IFN-gamma by T-cells during T-cell receptor (TCR) activation of naive cells and induces the expression of IFN-gamma by CD4(+) T-cells and to a lesser extent by CD8(+) T-cells (PubMed:18036228). Plays a role in preparing T-cells for cytokine sensing and differentiation into effector cells by inducing the expression of cytokine receptors IFNGR and IL4R, promoting IFNGR and IL4R signaling and by mediating the clustering of IFNGR with TCR (PubMed:24328034). Acts as a major E-selectin ligand responsible for Th17 cell rolling on activated vasculature and recruitment during inflammation. Mediates Th17 cells, but not Th1 cells, adhesion to E- selectin. Acts as a T-cell counter-receptor for SIGLEC1 (By similarity).
Cellular Location	Membrane; Single-pass type I membrane protein. Cell projection, microvillus {ECO:0000250|UniProtKB:P13838}. Cell projection, uropodium {ECO:0000250|UniProtKB:P15702}. Note=Localizes to the uropodium and microvilli via its interaction with ERM proteins (EZR, RDX and MSN) {ECO:0000250|UniProtKB:P13838, ECO:0000250|UniProtKB:P15702}
Tissue Location	Cell surface of thymocytes, T-lymphocytes, neutrophils, plasma cells and myelomas

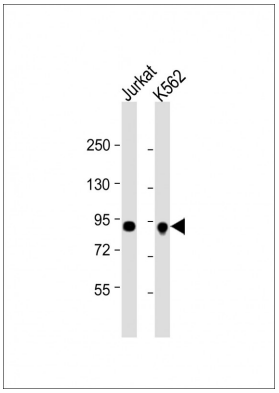
Background

Sialophorin (leukosialin) is a major sialoglycoprotein on the surface of human T lymphocytes, monocytes, granulocytes, and some B lymphocytes, which appears to be important for immune function and may be part of a physiologic ligand-receptor complex involved in T-cell activation.

References

Urano-Tashiro, Y., et al. Infect. Immun. 76(10):4686-4691(2008)
Mambole, A., et al. J. Biol. Chem. 283(35):23627-23635(2008)

Images



All lanes : Anti-SPN Antibody (Center) at 1:8000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.