

SPN/CD43 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14144a

Product Information

Application WB, IHC-P, E **Primary Accession** P16150

Other Accession NP 001025459.1, NP 003114.1

Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB34705
Calculated MW 40322
Antigen Region 32-60

Additional Information

Gene ID 6693

Other Names Leukosialin, Galactoglycoprotein, GALGP, Leukocyte sialoglycoprotein,

Sialophorin, CD43, SPN, CD43

Target/SpecificityThis SPN/CD43 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 32-60 amino acids from the N-terminal

region of human SPN/CD43.

Dilution WB~~1:1000 IHC-P~~1:100~500 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/CD43 Antibody (N-term) 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

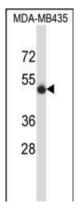
Background

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

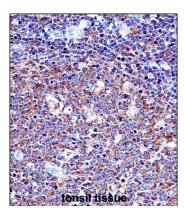
Urano-Tashiro, Y., et al. Infect. Immun. 76(10):4686-4691(2008) Mambole, A., et al. J. Biol. Chem. 283(35):23627-23635(2008) Seethala, R.R., et al. Appl. Immunohistochem. Mol. Morphol. 16(2):165-172(2008) Khunkaewla, P., et al. Mol. Immunol. 45(6):1703-1711(2008) Rawal, A., et al. Arch. Pathol. Lab. Med. 131(11):1673-1678(2007)

Images



SPN/CD43 Antibody (N-term) (Cat. #AP14144a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the SPN/CD43 antibody detected the SPN/CD43 protein (arrow).

SPN/CD43 Antibody (N-term) (AP14144a)immunohistochemistry analysis in formalin



fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SPN/CD43 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.