

Catalog # AM2012b

SPN/CD43 Antibody (N-term) Mouse Monoclonal Antibody (Mab)

Specification

SPN/CD43 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P16150</u> <u>NP_001025459.1</u>, <u>NP_003114.1</u> Human Mouse Monoclonal IgM 40322 230-257

SPN/CD43 Antibody (N-term) - Additional Information

Gene ID 6693

Other Names Leukosialin, Galactoglycoprotein, GALGP, Leukocyte sialoglycoprotein, Sialophorin, CD43, SPN, CD43

Target/Specificity

This SPN/CD43 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 230-257 amino acids from the N-terminal region of human SPN/CD43.

Dilution WB~~1:500~1000 E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

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.

SPN/CD43 Antibody (N-term) - 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:<u>18036228</u>). 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:<u>24328034</u>). 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

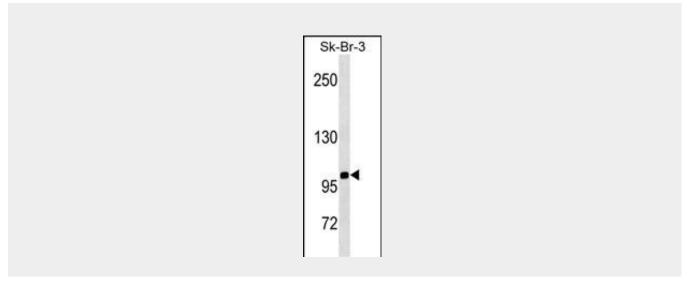
Cell surface of thymocytes, T-lymphocytes, neutrophils, plasma cells and myelomas

SPN/CD43 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SPN/CD43 Antibody (N-term) - Images





SPN/CD43 Antibody (N-term) (Cat. #AM2012b) western blot analysis in SK-BR-3 cell line lysates (35µg/lane).This demonstrates the SPN/CD43 antibody detected the SPN/CD43 protein (arrow).

SPN/CD43 Antibody (N-term) - 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.

SPN/CD43 Antibody (N-term) - 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)