

SPN Blocking Peptide (N-term) Synthetic peptide Catalog # BP13717A

# Specification

# SPN Blocking Peptide (N-term) - Product Information

Primary Accession Other Accession <u>P16150</u> <u>NP 001025459.1, NP 003114.1</u>

# SPN Blocking Peptide (N-term) - Additional Information

Gene ID 6693

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

Target/Specificity The synthetic peptide sequence is selected from aa 50-64 of HUMAN SPN

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# SPN Blocking Peptide (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:<a href="http://www.uniprot.org/citations/18036228" target="\_blank">18036228</a>). 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:<a



href="http://www.uniprot.org/citations/24328034" target="\_blank">24328034</a>). 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 Blocking Peptide (N-term) - Protocols

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

#### <u>Blocking Peptides</u>

# SPN Blocking Peptide (N-term) - Images

# SPN Blocking Peptide (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 Blocking Peptide (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)