

# CD43 (T-Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM503] Catalog # AH10744

#### **Product Information**

ApplicationIF, FC, IHC-PPrimary AccessionP16150Other Accession6693, 632188ReactivityHumanHostMouseClonalityMonoclonal

Isotype Mouse / IgG1, kappa

Clone Names SPM503 Calculated MW 40322

#### **Additional Information**

**Gene ID** 6693

Other Names Leukosialin, Galactoglycoprotein, GALGP, Leukocyte sialoglycoprotein,

Sialophorin, CD43, SPN, CD43

**Application Note** IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A

**Format** 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.

Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available

WITHOUT BSA & azide at 1.0mg/ml.

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** CD43 (T-Cell Marker) Antibody - With BSA and Azide 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

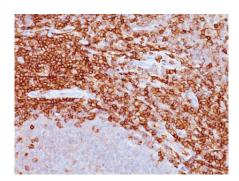
### **Background**

It recognizes a cell surface glycoprotein of 95/115/135kDa (depending upon the extent of glycosylation), identified as CD43. 70-90% of T-cell lymphomas and from 22-37% of B-cell lymphomas express CD43. No reactivity has been observed with reactive B-cells. So a B-lineage population that co-expresses CD43 is highly likely to be a malignant lymphoma, especially a low-grade lymphoma, rather than a reactive B-cell population. When CD43 antibody is used in combination with anti-CD20, effective immunophenotyping of the lymphomas in formalin-fixed tissues can be obtained. Co-staining of a lymphoid infiltrate with anti-CD20 and anti-CD43 argues against a reactive process and favors a diagnosis of lymphoma.

#### References

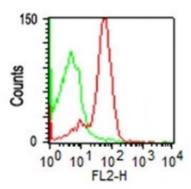
Stross WP, et. al. Journal of Clinical Pathology, 1989, 42(9):953-61

## **Images**



Formalin-fixed, paraffin-embedded human Spleen stained with CD43 Monoclonal Antibody (SPM503).

Flow Cytometry of PBMC using CD43 Monoclonal Antibody (SPM503) (red) or isotype control (green)



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