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

Mouse Monoclonal Antibody [Clone 84-3C1]
Catalog # AH12357

Product Information

Application	IHC, IF, FC
Primary Accession	P16150
Other Accession	6693, 632188
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	84-3C1
Calculated MW	40322

Additional Information

Gene ID	6693
Other Names	Leukosialin, Galactoglycoprotein, GALGP, Leukocyte sialoglycoprotein, Sialophorin, CD43, SPN, CD43
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
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).

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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 (Workshop III). 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

Cobbold S. et. al. Leucocyte Typing III, (ed. McMichael AJ et. al.), Oxford Univ. Press, p789-803, 1987

Images
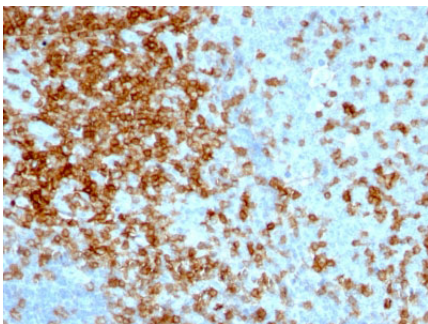
Formalin-fixed, paraffin-embedded human Tonsil stained with CD43 Monoclonal Antibody (84-3C1).