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CD15 / FUT4 (Reed-Sternberg Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone Leu-M1; same as MMA]
Catalog # AH10474

Product Information

Application	IF, FC, IHC-P
Primary Accession	P22083
Other Accession	2526, 654379
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgM, kappa
Clone Names	Leu-M1; same as MMA
Calculated MW	59084

Additional Information

Gene ID	2526
Other Names	Alpha-(1, 3)-fucosyltransferase 4, 2.4.1.-, ELAM-1 ligand fucosyltransferase, Fucosyltransferase 4, Fucosyltransferase IV, Fuc-TIV, FucT-IV, Galactoside 3-L-fucosyltransferase, FUT4, ELFT, FCT3A
Application Note	IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A
Format	200ug/ml of Ab purified from Bioreactor Concentrate. 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	CD15 / FUT4 (Reed-Sternberg Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FUT4 {ECO:0000303|PubMed:29593094}
Function	[Isoform Short]: Catalyzes alpha(1->3) linkage of fucosyl moiety transferred from GDP-beta-L-fucose to N-acetyl glucosamine (GlcNAc) within type 2 lactosamine (LacNAc, Gal-beta(1->4)GlcNAc) glycan attached to N- or O-linked glycoproteins (PubMed:1702034, PubMed:1716630, PubMed:29593094). Robustly fucosylates nonsialylated distal LacNAc unit of the polylactosamine chain to form Lewis X antigen (CD15), a glycan determinant known to mediate important cellular functions in development and immunity. Fucosylates with

	lower efficiency sialylated LacNAc acceptors to form sialyl Lewis X and 6- sulfo sialyl Lewis X determinants that serve as recognition epitopes for C-type lectins (PubMed:1716630, PubMed:29593094). Together with FUT7 contributes to SELE, SELL and SELP selectin ligand biosynthesis and selectin-dependent lymphocyte homing, leukocyte migration and blood leukocyte homeostasis (By similarity). In a cell type specific manner, may also fucosylate the internal LacNAc unit of the polylactosamine chain to form VIM-2 antigen that serves as recognition epitope for SELE (PubMed:11278338, PubMed:1716630).
Cellular Location	Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein. Note=Membrane-bound form in trans cisternae of Golgi
Tissue Location	[Isoform Short]: Expressed at low levels in bone marrow-derived mesenchymal stem cells.

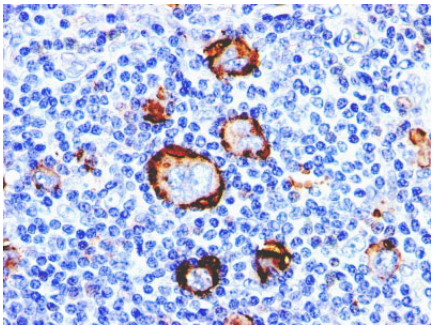
Background

CD15 plays a role in mediating phagocytosis, bactericidal activity, and chemotaxis. It is present on >95% of granulocytes including neutrophils and eosinophils and to a lesser degree on monocytes. In addition, CD15 is expressed in Reed-Sternberg cells and some epithelial cells. CD15 antibody is very useful in the identification of Hodgkin s disease. CD15 is occasionally expressed in large cell lymphomas of both B and T phenotypes which otherwise have a quite distinct histological appearance.

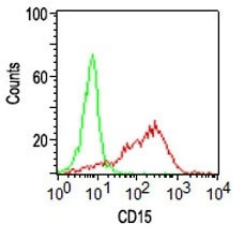
References

Hanjan SN et. al. Clinical Immunology & Immunopathology, 1982;23(2):172-88.2. Hsu et. al. Amer J Clin Pathol 82: 29, 1984.3. Pinkus et. al. Am J Pathol 119: 244, 1985

Images



Formalin-fixed, paraffin-embedded human Hodgkin's Lymphoma stained with CD15 Monoclonal Antibody (Leu-M1).



FACS analysis of human Monocytes using CD15 Monoclonal Antibody (Leu-M1).

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