

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

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

### **Specification**

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

Application IHC-P, IF, FC
Primary Accession P22083
Other Accession 2526, 654379
Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgM, kappa

Calculated MW ~220kDa KDa

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

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class = "dilution\_IF">IF~~1:50~200</span><br \> <span class = "dilution\_FC">FC~~1:10~50</span>

#### **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.

# CD15 / FUT4 (Reed-Sternberg Cell Marker) Antibody - With BSA and Azide - 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:<a href="http://www.uniprot.org/citations/1702034" target="\_blank">1702034</a>, PubMed:<a href="http://www.uniprot.org/citations/1716630" target="\_blank">1716630</a>, PubMed:<a href="http://www.uniprot.org/citations/29593094" target="\_blank">29593094</a>). 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:<a href="http://www.uniprot.org/citations/1716630" target="\_blank">1716630</a>, PubMed:<a href="http://www.uniprot.org/citations/29593094" target="\_blank">29593094</a>). 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:<a href="http://www.uniprot.org/citations/11278338" target="\_blank">1716630</a>

#### **Cellular Location**

Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein. Note=Membrane-bound form in trans cisternae of Golgi

#### **Tissue Location**

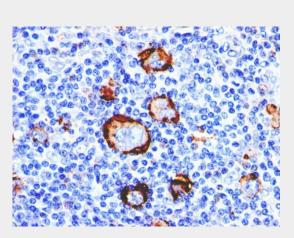
[Isoform Short]: Expressed at low levels in bone marrow-derived mesenchymal stem cells.

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

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

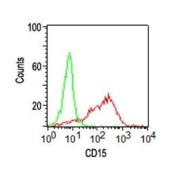
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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

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

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