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CD15 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1589a

Product Information

Application	IHC, ICC, E
Primary Accession	P22083
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4E10
Isotype	IgG1
Calculated MW	59084
Description	The product of this gene transfers fucose to N-acetyllactosamine polysaccharides to generate fucosylated carbohydrate structures. It catalyzes the synthesis of the non-sialylated antigen, Lewis x (CD15).
Immunogen	Synthesized peptide of human CD15.
Formulation	Ascitic fluid containing 0.03% sodium 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
Dilution	IHC~~1/200 - 1/1000 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD15 Antibody 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.

References

1. Cancer Cell. 2009 Feb 3;15(2):135-47. 2. Biochim Biophys Acta. 2008 Feb;1783(2):287-96.

Images

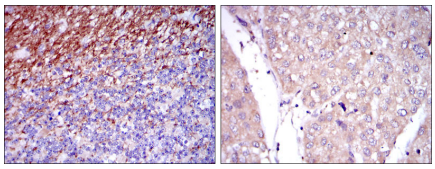

Figure 1: Immunohistochemical analysis of paraffin-embedded human cerebellum tissues (left) and human liver cancer tissues (right) using CD15 mouse mAb with DAB staining.

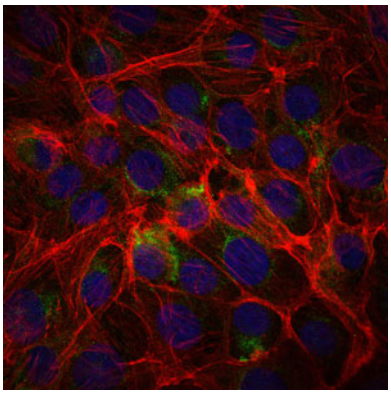

Figure 2: Immunofluorescence analysis of PC-2 cells using CD15 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.