

FUT4 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12067b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P22083
Other Accession	NP_002024.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14324
Calculated MW	59084
Antigen Region	495-524

Additional Information

Gene ID	2526
Other Names	Alpha-(1, 3)-fucosyltransferase 4, 241-, ELAM-1 ligand fucosyltransferase, Fucosyltransferase 4, Fucosyltransferase IV, Fuc-TIV, FucT-IV, Galactoside 3-L-fucosyltransferase, FUT4, ELFT, FCT3A
Target/Specificity	This FUT4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 495-524 amino acids from the C-terminal region of human FUT4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FUT4 Antibody (C-term) 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.

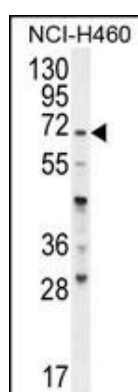
Background

The product of this gene transfers fucose to N-acetylglucosamine polysaccharides to generate fucosylated carbohydrate structures. It catalyzes the synthesis of the non-sialylated antigen, Lewis x (CD15).

References

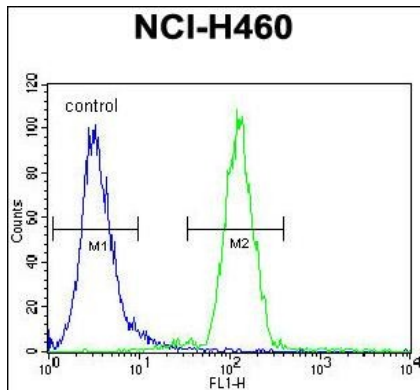
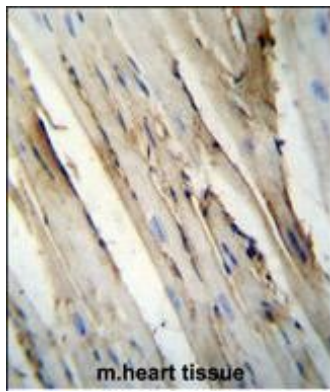
Yang, X.S., et al. J. Cell. Physiol. 225(2):612-619(2010) Trubiani, O., et al. J. Cell. Physiol. 225(1):123-131(2010) Pruszek, J., et al. Stem Cells 27(12):2928-2940(2009) Ogata, K., et al. Haematologica 94(8):1066-1074(2009) Read, T.A., et al. Cancer Cell 15(2):135-147(2009)

Images



FUT4 Antibody (C-term) (Cat. #AP12067b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the FUT4 antibody detected the FUT4 protein (arrow).

FUT4 Antibody (C-term) (Cat. #AP12067b) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of FUT4 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



FUT4 Antibody (C-term) (Cat. #AP12067b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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