

FUT4 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12067b

Specification

FUT4 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region

WB, IHC-P, FC,E <u>P22083</u> <u>NP_002024.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 59084 495-524

FUT4 Antibody (C-term) - 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~~1:50~100 FC~~1:10~50

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.

FUT4 Antibody (C-term) - 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:<u>1702034</u>, PubMed:<u>1716630</u>, PubMed:<u>29593094</u>). 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:<u>1716630</u>, PubMed:<u>29593094</u>). 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:<u>11278338</u>, PubMed:<u>1716630</u>).

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.

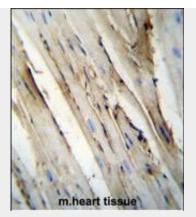
FUT4 Antibody (C-term) - Protocols

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

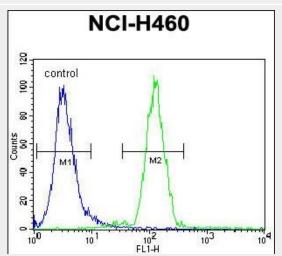
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- FUT4 Antibody (C-term) Images

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.

FUT4 Antibody (C-term) - Background

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).

FUT4 Antibody (C-term) - 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) Pruszak, 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)