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FUT3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9410B

Specification

FUT3 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P21217
Other Accession	P51993, Q11128
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42117**
Antigen Region	**288-315**

FUT3 Antibody (C-term) - Additional Information

Gene ID 2525

Other Names
Galactoside 3(4)-L-fucosyltransferase, Blood group Lewis alpha-4-fucosyltransferase, Lewis FT, Fucosyltransferase 3, Fucosyltransferase III, FucT-III, FUT3, FT3B, LE

Target/Specificity
This FUT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 288-315 amino acids from the C-terminal region of human FUT3.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
FUT3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FUT3 Antibody (C-term) - Protein Information

Name FUT3 (HGNC:4014)

Synonyms FT3B, LE

Function Catalyzes the transfer of L-fucose, from a guanosine diphosphate-beta-L-fucose, to both the subterminal N-acetyl glucosamine (GlcNAc) of type 1 chain (beta-D-Gal-(1->3)-beta-D-GlcNAc) glycolipids and oligosaccharides via an alpha(1,4) linkage, and the subterminal glucose (Glc) or GlcNAc of type 2 chain (beta-D-Gal-(1->4)-beta-D- GlcNAc) oligosaccharides via an alpha(1,3) linkage, independently of the presence of terminal alpha-L-fucosyl-(1,2) moieties on the terminal galactose of these acceptors (PubMed:11058871, PubMed:12668675, PubMed:1977660). Through its catalytic activity, participates in the synthesis of antigens of the Lewis blood group system, i.e. Lewis a (Le(a)), lewis b (Le(b)), Lewis x/SSEA-1 (Le(x)) and lewis y (Le(y)) antigens (PubMed:11058871, PubMed:12668675, PubMed:1977660). Also catalyzes the transfer of L-fucose to subterminal GlcNAc of sialyl- and disialyl-lactotetraosylceramide to produce sialyl Lewis a (sLe(a)) and disialyl Lewis a via an alpha(1,4) linkage and therefore may regulate cell surface sLe(a) expression and consequently regulates adhesive properties to E-selectin, cell proliferation and migration (PubMed:11058871, PubMed:12668675, PubMed:27453266). Catalyzes the transfer of an L-fucose to 3'-sialyl-N-acetyllactosamine by an alpha(1,3) linkage, which allows the formation of sialyl-Lewis x structure and therefore may regulate the sialyl-Lewis x surface antigen expression and consequently adhesive properties to E-selectin (PubMed:11058871, PubMed:29593094). Prefers type 1 chain over type 2 acceptors (PubMed:7721776). Type 1 tetrasaccharide is a better acceptor than type 1 disaccharide suggesting that a beta anomeric configuration of GlcNAc in the substrate is preferred (PubMed:7721776). Lewis- positive (Le(+)) individuals have an active enzyme while Lewis-negative (Le(-)) individuals have an inactive enzyme (PubMed:1977660).

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

Tissue Location
Highly expressed in stomach, colon, small intestine, lung and kidney and to a lesser extent in salivary gland, bladder, uterus and liver.

FUT3 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FUT3 Antibody (C-term) - Images

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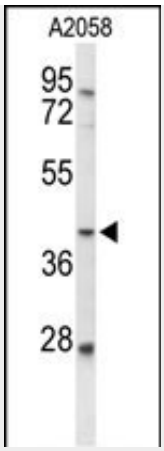

Western blot analysis of FUT3 Antibody (C-term) (Cat. #AP9410b) in A2058 cell line lysates (35ug/lane). FUT3 (arrow) was detected using the purified Pab.

FUT3 Antibody (C-term) - Background

FUT3 comprises a set of fucosylated glycosphingolipids that are synthesized by exocrine epithelial cells and circulate in body fluids. The glycosphingolipids function in embryogenesis, tissue differentiation, tumor metastasis, inflammation, and bacterial adhesion. They are secondarily absorbed to red blood cells giving rise to their Lewis phenotype. This protein is a member of the fucosyltransferase family, which catalyzes the addition of fucose to precursor polysaccharides in the last step of Lewis antigen biosynthesis. It encodes an enzyme with alpha(1,3)-fucosyltransferase and alpha(1,4)-fucosyltransferase activities.

FUT3 Antibody (C-term) - References

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