10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FUT9 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56175

Specification

FUT9 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q9Y231
Reactivity	**Rat, Pig, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**42 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human FUT9**
Epitope Specificity	**281-359/359**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Golgi apparatus ?Golgi stack membrane; Single-pass type II membrane protein. Note: Membrane-bound form in trans cisternae of Golgi.**
SIMILARITY	**Belongs to the glycosyltransferase 10 family.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
The protein encoded by this gene belongs to the glycosyltransferase family. It is localized to the golgi, and catalyzes the last step in the biosynthesis of Lewis X (LeX) antigen, the addition of a fucose to precursor polysaccharides. This protein is one of the few fucosyltransferases that synthesizes the LeX oligosaccharide (CD15) expressed in the organ buds progressing in mesenchyma during embryogenesis. It is also responsible for the expression of CD15 in mature granulocytes. A common haplotype of this gene has also been associated with susceptibility to placental malaria infection. [provided by RefSeq, Nov 2011]

FUT9 Polyclonal Antibody - Additional Information

Gene ID 10690

Other Names
4-galactosyl-N-acetylglucosaminide 3-alpha-L-fucosyltransferase 9, 2.4.1.152, Fucosyltransferase 9, Fucosyltransferase IX, Fuc-TIX, FucT-IX, Galactoside 3-L-fucosyltransferase, FUT9 {ECO:0000303|PubMed:10929005, ECO:0000312|HGNC:HGNC:4020}

Target/Specificity
Strongly expressed in forebrain and stomach, lower expression in spleen and peripheral blood leukocytes, and no expression in small intestine, colon, liver, lung, kidney, adrenal cortex or uterus.

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

FUT9 Polyclonal Antibody - Protein Information

Name FUT9 {ECO:0000303|PubMed:10929005, ECO:0000312|HGNC:HGNC:4020}

Function
Catalyzes alpha(1->3) linkage of fucosyl moiety transferred from GDP-beta-L-fucose to N-acetyl glucosamine (GlcNAc) within type 2 lactosamine (LacNAc, beta-D-Gal-(1->4)-beta-D-GlcNAc-) glycan attached to glycolipids and N- or O-linked glycoproteins. Fucosylates distal type 2 LacNAc and its fucosylated (H-type 2 LacNAc) and sialylated (sialyl-type 2 LacNAc) derivatives to form Lewis x (Lex) (CD15) and Lewis y (Ley) antigenic epitopes involved in cell adhesion and differentiation (PubMed:10386598, PubMed:10622713, PubMed:11278338, PubMed:12107078, PubMed:16282604, PubMed:17335083, PubMed:18395013, PubMed:23192350, PubMed:23263199, PubMed:29593094, PubMed:37202521). Generates Lex epitopes in the brain, presumably playing a role in the maintenance of neuronal stemness and neurite outgrowth in progenitor neural cells (By similarity) (PubMed:17335083, PubMed:23000574). Fucosylates the internal type 2 LacNAc unit of the polylactosamine chain to form VIM-2 antigen that serves as recognition epitope for SELE (PubMed:23192350). Can also modify milk oligosaccharides, in particular type 2 tetrasaccharide LNnT (PubMed:37202521).

Cellular Location
Golgi apparatus, trans-Golgi network membrane; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q6P4F1}. Golgi apparatus membrane {ECO:0000250|UniProtKB:O88819}

Tissue Location

Strongly expressed in forebrain and stomach, lower expression in spleen and peripheral blood leukocytes, and no expression in small intestine, colon, liver, lung, kidney, adrenal cortex or uterus (PubMed:10386598). Highly expressed in granulocytes. Not expressed in monocytes (PubMed:11278338).

FUT9 Polyclonal Antibody - 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

FUT9 Polyclonal Antibody - Images