

FUT9 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP18012b**Specification**

FUT9 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O9Y231](#)**FUT9 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 10690**Other Names**

Alpha-(1, 3)-fucosyltransferase 9, 241-, Fucosyltransferase 9, Fucosyltransferase IX, Fuc-TIX, FucT-IX, Galactoside 3-L-fucosyltransferase, FUT9

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FUT9 Antibody (C-term) Blocking Peptide - 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:10622713, PubMed:11278338, PubMed:12107078, PubMed:16282604, PubMed:17335083, PubMed:18395013, PubMed:23192350, PubMed:23263199, PubMed:29593094, PubMed:37202521, PubMed:10386598). Generates Lex epitopes in the brain, presumably playing a role

in the maintenance of neuronal stemness and neurite outgrowth in progenitor neural cells (PubMed:17335083, PubMed:23000574) (By similarity). 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 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FUT9 Antibody (C-term) Blocking Peptide - Images

FUT9 Antibody (C-term) Blocking Peptide - Background

FUT9 is one of several alpha-3-fucosyltransferases that can catalyze the last step in the biosynthesis of Lewis antigen, the addition of a fucose to precursor polysaccharides. FUT9 synthesizes the LeX oligosaccharide (CD15), which is expressed in organ buds progressing in mesenchyma during human embryogenesis.

FUT9 Antibody (C-term) Blocking Peptide - References

Rose, J. Phd, et al. Mol. Med. (2010) In press :Sikora, M., et al. Hum. Mol. Genet. 18(16):3136-3144(2009) Brito, C., et al. Biochimie 90(9):1279-1290(2008) Bogoevska, V., et al. Glycobiology 16(3):197-209(2006) Mungall, A.J., et al. Nature 425(6960):805-811(2003)