

FUT7 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP16272a**Specification**

FUT7 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O11130](#)**FUT7 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 2529**Other Names**

Alpha-(1, 3)-fucosyltransferase 7, 241-, Fucosyltransferase 7, Fucosyltransferase VII, Fuc-TVII, FucT-VII, Galactoside 3-L-fucosyltransferase, Selectin ligand synthase, FUT7

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.

FUT7 Antibody (N-term) Blocking Peptide - Protein Information**Name** FUT7 ([HGNC:4018](#))**Function**

Catalyzes the transfer of L-fucose, from a guanosine diphosphate-beta-L-fucose, to the N-acetyl glucosamine (GlcNAc) of a distal alpha2,3 sialylated lactosamine unit of a glycoprotein or a glycolipid-linked sialopolylactosamines chain through an alpha-1,3 glycosidic linkage and participates in the final fucosylation step in the biosynthesis of the sialyl Lewis X (sLe(x)), a carbohydrate involved in cell and matrix adhesion during leukocyte trafficking and fertilization (PubMed:8207002, PubMed:8752218, PubMed:8666674, PubMed:9299472, PubMed:9405391, PubMed:9473504, PubMed:9499379, PubMed:9461592, PubMed:15632313, PubMed:15926890, PubMed:18553500, PubMed:18402946.

PubMed:11404359, PubMed:29593094). In vitro, also synthesizes sialyl-dimeric-Lex structures, from VIM-2 structures and both di-fucosylated and trifucosylated structures from mono-fucosylated precursors (PubMed:9499379). However does not catalyze alpha 1-3 fucosylation when an internal alpha 1-3 fucosylation is present in polylactosamine chain and the fucosylation rate of the internal GlcNAc residues is reduced once fucose has been added to the distal GlcNAc (PubMed:9473504, PubMed:9499379). Also catalyzes the transfer of a fucose from GDP-beta-fucose to the 6-sulfated a(2,3)sialylated substrate to produce 6-sulfo sLex mediating significant L-selectin- dependent cell adhesion (PubMed:10200296, PubMed:8752218). Through sialyl-Lewis(x) biosynthesis, can control SELE- and SELP-mediated cell adhesion with leukocytes and allows leukocytes tethering and rolling along the endothelial tissue thereby enabling the leukocytes to accumulate at a site of inflammation (PubMed:10386892, PubMed:29138114, PubMed:8666674, PubMed:9473504, PubMed:9834120). May enhance embryo implantation through sialyl Lewis X (sLex)-mediated adhesion of embryo cells to endometrium (PubMed:18402946, PubMed:18553500). May affect insulin signaling by up-regulating the phosphorylation and expression of some signaling molecules involved in the insulin-signaling pathway through SLe(x) which is present on the glycans of the INSRR alpha subunit (PubMed:17229154).

Cellular Location

Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein.

Note=Membrane-bound form in trans cisternae of Golgi

Tissue Location

Leukocytic/myeloid lineage cells.

FUT7 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FUT7 Antibody (N-term) Blocking Peptide - Images

FUT7 Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene is a Golgi stack membraneprotein that is involved in the creation of sialyl-Lewis Xantigens. The encoded protein can direct the synthesis of theE-selectin-binding sialyl-Lewis X moiety.

FUT7 Antibody (N-term) Blocking Peptide - References

Li, W., et al. Oncol. Rep. 23(6):1609-1617(2010)Yoshida, T., et al. Int. J. Mol. Med. 25(4):649-656(2010)Oguri, M., et al. Am. J. Hypertens. 23(1):70-77(2010)Zhang, Y., et al. Fertil. Steril. 91(3):908-914(2009)Wang, Q.Y., et al. J. Cell. Biochem. 104(6):2078-2090(2008)