

FUT4 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP2773c

Specification

FUT4 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

P22083

FUT4 Antibody (Center) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP2773c was selected from the Center region of human FUT4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

FUT4 Antibody (Center) Blocking Peptide - 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:29593094, PubMed:1702034, PubMed:1716630). 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:29593094/a>,



PubMed:1716630). 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:1716630, PubMed:11278338).

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 (Center) Blocking Peptide - Protocols

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

Blocking Peptides

FUT4 Antibody (Center) Blocking Peptide - Images

FUT4 Antibody (Center) Blocking Peptide - Background

FUT4 catalyzes the synthesis of the non-sialylated antigen, Lewis x (CD15). It has been detected in human embryos (5-10 weeks) suggesting a role in development.

FUT4 Antibody (Center) Blocking Peptide - References

Zhang, Z., Biochim. Biophys. Acta 1783 (2), 287-296 (2008) Cruse, J.M., Exp. Mol. Pathol. 83 (2), 274-276 (2007)