

POFUT1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12747b

Specification

POFUT1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession [Q9H488](#)

POFUT1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 23509

Other Names

GDP-fucose protein O-fucosyltransferase 1, Peptide-O-fucosyltransferase 1, O-FucT-1, POFUT1, FUT12, KIAA0180

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.

POFUT1 Antibody (C-term) Blocking peptide - Protein Information

Name POFUT1

Synonyms FUT12, KIAA0180

Function

Catalyzes the reaction that attaches fucose through an O- glycosidic linkage to a conserved serine or threonine residue found in the consensus sequence C2-X(4,5)-[S/T]-C3 of EGF domains, where C2 and C3 are the second and third conserved cysteines. Specifically uses GDP- fucose as donor substrate and proper disulfide pairing of the substrate EGF domains is required for fucose transfer. Plays a crucial role in NOTCH signaling. Initial fucosylation of NOTCH by POFUT1 generates a substrate for FRINGE/RFNG, an acetylglucosaminyltransferase that can then extend the fucosylation on the NOTCH EGF repeats. This extended fucosylation is required for optimal ligand binding and canonical NOTCH signaling induced by DLL1 or JAGGED1. Fucosylates AGRN and determines its ability to cluster acetylcholine receptors (AChRs).

Cellular Location

Endoplasmic reticulum {ECO:0000250|UniProtKB:Q6EV70}

Tissue Location

Highly expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

POFUT1 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

POFUT1 Antibody (C-term) Blocking peptide - Images**POFUT1 Antibody (C-term) Blocking peptide - Background**

This gene encodes a member of the glycosyltransferase O-Fuc family. This enzyme adds O-fucose through an O-glycosidic linkage to conserved serine or threonine residues in the epidermal growth factor-like repeats of a number of cell surface and secreted proteins. O-fucose glycans are involved in ligand-induced receptor signaling. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq].

POFUT1 Antibody (C-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Stahl, M., et al. J. Biol. Chem. 283(20):13638-13651(2008)Luo, Y., et al. J. Biol. Chem. 280(12):11289-11294(2005)Shi, S., et al. Proc. Natl. Acad. Sci. U.S.A. 100(9):5234-5239(2003)Panin, V.M., et al. J. Biol. Chem. 277(33):29945-29952(2002)