

ARG66721 anti-POFUT1 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes POFUT1
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	POFUT1
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 331-380 of Human POFUT1.
Conjugation	Un-conjugated
Alternate Names	FUT12; DDD2; GDP-fucose protein O-fucosyltransferase 1; O-FUT; Peptide-O-fucosyltransferase 1; OFUCT1; O-FucT-1; EC 2.4.1.221; O-Fuc-T

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 41 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

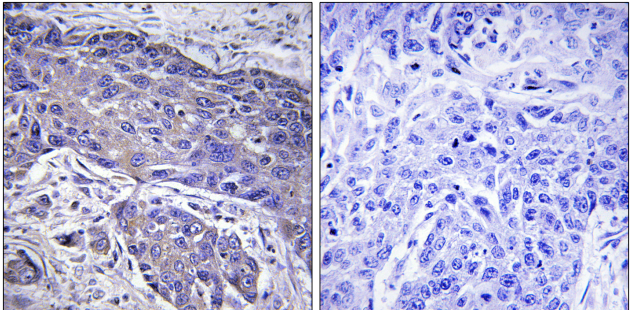
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

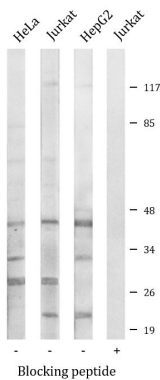
Gene Symbol	POFUT1
Gene Full Name	protein O-fucosyltransferase 1
Background	This gene encodes a member of the glycosyltransferase O-Fuc family. This enzyme adds O-fucose through an O-glycosidic linkage to conserved serine or threonine residues in the epidermal growth factor-like repeats of a number of 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, Jul 2008]
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). [UniProt]
Calculated Mw	44 kDa
PTM	N-glycosylated. [UniProt]
Cellular Localization	Endoplasmic reticulum. [UniProt]

Images



ARG66721 anti-POFUT1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung carcinoma tissue stained with ARG66721 anti-POFUT1 antibody. The picture on the right is blocked with the synthetic peptide.



ARG66721 anti-POFUT1 antibody WB image

Western blot: HeLa, Jurkat and HepG2 cell lysates stained with ARG66721 anti-POFUT1 antibody. The lane on the right is blocked with the synthetic peptide.