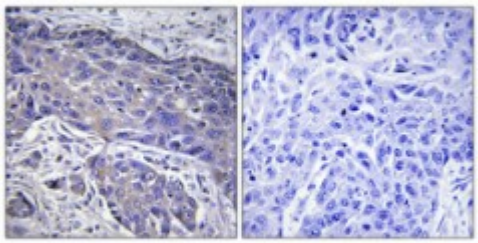
Anti-O-FucT-1 antibody



Description	Rabbit polyclonal to O-FucT-1.

Model	STJ94602
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human O-FucT-1
Immunogen Region	300-380 aa, C-terminal
Gene ID	23509
Gene Symbol	POFUT1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	O-FucT-1 Polyclonal Antibody detects endogenous levels of O-FucT-1 protein.
Tissue Specificity	Highly expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	GDP-fucose protein O-fucosyltransferase 1 Peptide-O-fucosyltransferase 1 O-FucT-1
Molecular Weight	44 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:14988OMIM:607491
Alternative Names	GDP-fucose protein O-fucosyltransferase 1 Peptide-O-fucosyltransferase 1 O-FucT-1
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 Localization	Endoplasmic reticulum
Post-translational Modifications	N-glycosylated.