10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GALNT4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10190a

Product Information

Application	WB, FC, E
Primary Accession	Q8N4A0
Other Accession	O08832, NP_003765.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23943
Calculated MW	66666
Antigen Region	93-120

Additional Information

Gene ID	8693
Other Names	Polypeptide N-acetylgalactosaminyltransferase 4, Polypeptide GalNAc transferase 4, GalNAc-T4, pp-GaNTase 4, Protein-UDP acetylgalactosaminyltransferase 4, UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 4, GALNT4
Target/Specificity	This GALNT4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 93-120 amino acids from the N-terminal region of human GALNT4.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GALNT4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GALNT4

Function	Catalyzes the initial reaction in O-linked oligosaccharide biosynthesis, the transfer of an N-acetyl-D-galactosamine residue to a serine or threonine residue on the protein receptor. Has a highest activity toward Muc7, EA2 and Muc2, with a lowest activity than GALNT2. Glycosylates 'Thr-57' of SELPLG.
Cellular Location	Golgi apparatus membrane; Single-pass type II membrane protein
Tissue Location	Ubiquitous. Highly expressed in mucous cells.

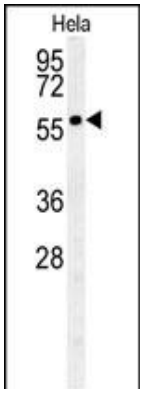
Background

This gene encodes a member of the UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNAc-T) family of enzymes. GalNAc-Ts initiate mucin-type O-linked glycosylation in the Golgi apparatus by catalyzing the transfer of GalNAc to serine and threonine residues on target proteins. They are characterized by an N-terminal transmembrane domain, a stem region, a lumenal catalytic domain containing a GT1 motif and Gal/GalNAc transferase motif, and a C-terminal ricin/lectin-like domain. GalNAc-Ts have different, but overlapping, substrate specificities and patterns of expression. In vitro, the encoded protein can complement other GalNAc-Ts in the complete O-glycosylation of the mucin-1 tandem repeat and can O-glycosylate the P-selectin glycoprotein ligand-1 molecule. The coding region of this gene is contained within a single exon.

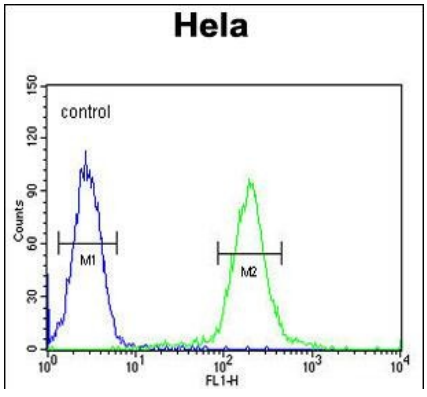
References

O'Halloran, A.M., et al. J. Thromb. Thrombolysis 27(2):175-184(2009)
Argueso, P., et al. Invest. Ophthalmol. Vis. Sci. 44(1):86-92(2003)
Hassan, H., et al. J. Biol. Chem. 275(49):38197-38205(2000)
Bennett, E.P., et al. J. Biol. Chem. 273(46):30472-30481(1998)
Bennett, E.P., et al. Glycobiology 8(6):547-555(1998)

Images



GALNT4 Antibody (N-term) (Cat. #AP10190a) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the GALNT4 antibody detected the GALNT4 protein (arrow).



GALNT4 Antibody (N-term) (Cat. #AP10190a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.