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GALNT2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9333a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q10471
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23942
Calculated MW	64733
Antigen Region	26-53

Additional Information

Gene ID	2590
Other Names	Polypeptide N-acetylgalactosaminyltransferase 2, Polypeptide GalNAc transferase 2, GalNAc-T2, pp-GaNTase 2, Protein-UDP acetylgalactosaminyltransferase 2, UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 2, Polypeptide N-acetylgalactosaminyltransferase 2 soluble form, GALNT2
Target/Specificity	This GALNT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-53 amino acids from the N-terminal region of human GALNT2.
Dilution	WB~~1:2000 IHC-P~~1:100~500 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	GALNT2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GALNT2

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 broad spectrum of substrates for peptides such as EA2, Muc5AC, Muc1a, Muc1b. Probably involved in O-linked glycosylation of the immunoglobulin A1 (IgA1) hinge region. Involved in O-linked glycosylation of APOC-III, ANGPTL3 and PLTP. It participates in the regulation of HDL-C metabolism (PubMed:27508872, PubMed:32293671).
Cellular Location	Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Secreted. Note=Resides preferentially in the trans and medial parts of the Golgi stack. A secreted form also exists
Tissue Location	Detected in urine (at protein level) (PubMed:37453717). Widely expressed.

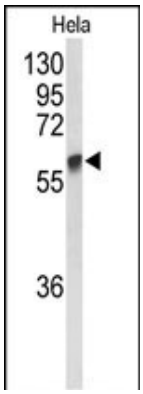
Background

GALNT2 encodes polypeptide N-acetylgalactosaminyltransferase 2, a member of the GalNAc-transferases family. This family transfers an N-acetyl galactosamine to the hydroxyl group of a serine or threonine residue in the first step of O-linked oligosaccharide biosynthesis. Individual GalNAc-transferases have distinct activities and initiation of O-glycosylation in a cell is regulated by a repertoire of GalNAc-transferases.

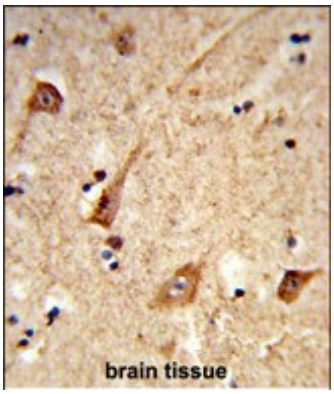
References

Weissglas-Volkov,D. Circ Cardiovasc Genet 3 (1), 31-38 (2010)
Hegele,R.A. Hum. Mol. Genet. 18 (21), 4189-4194 (2009)
Nakayama,K. J. Med. Genet. 46 (6), 370-374 (2009)

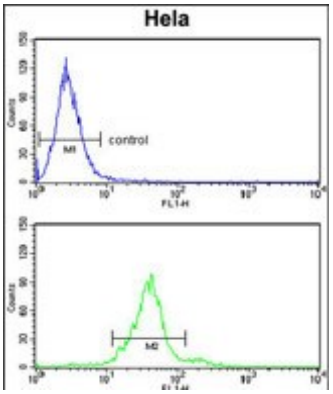
Images



Western blot analysis of GALNT2 Antibody (N-term) (Cat. #AP9333a) in Hela cell line lysates (35ug/lane). GALNT2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with GALNT2 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



GALNT2 Antibody (N-term) (Cat. #AP9333a) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- GALNT2 promotes cell proliferation, migration, and invasion by activating the Notch/Hes1-PTEN-PI3K/Akt signaling pathway in lung adenocarcinoma

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