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GALNT10 Antibody

Catalog # ASC10950

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q86SR1
Other Accession	NP_938080, 38195091
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	68992
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	GALNT10 antibody can be used for detection of GALNT10 by Western blot at 1 - 2 □g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 □g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID	55568
Other Names	Polypeptide N-acetylgalactosaminyltransferase 10, 2.4.1.41, Polypeptide GalNAc transferase 10, GalNAc-T10, pp-GaNTase 10, Protein-UDP acetylgalactosaminyltransferase 10, UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10, GALNT10
Target/Specificity	GALNT10;
Reconstitution & Storage	GALNT10 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	GALNT10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GALNT10
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 activity toward Muc5Ac and EA2 peptide substrates.
Cellular Location	Golgi apparatus membrane; Single- pass type II membrane protein

Tissue Location	Widely expressed. Expressed at high level in small intestine, and at intermediate levels in stomach, pancreas, ovary, thyroid gland and spleen. Weakly expressed in other tissues

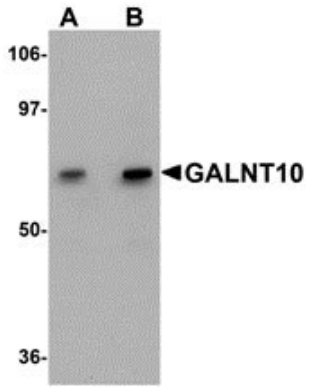
Background

GALNT10 Antibody: Protein glycosylation is an important biological process that is carried out by a large family of glycosyltransferases that catalyze the synthesis of oligosaccharides and glycoconjugates. Polypeptide GalNAc transferases initiate the synthesis of mucin-type oligosaccharides by transferring GalNAc from UDP-GalNAc to the hydroxyl group of either a serine or threonine residue on the polypeptide acceptor. Polypeptide galactoaminyltransferase 10 (GALNT10) belongs to the polypeptide N-acetylgalactosaminyl-transferase (pp-GalNAc-T) protein family. Following expression in insect cells, recombinant GALNT10 showed significant GalNAcT activity toward mucin-derived peptides, and it utilized both non-glycosylated and glycosylated peptide substrates. GALNT10 mRNA is highly expressed in several distinct hypothalamic, thalamic, and amygdaloid nuclei in mouse brain. At least four isoforms of GALNT10 are known to exist.

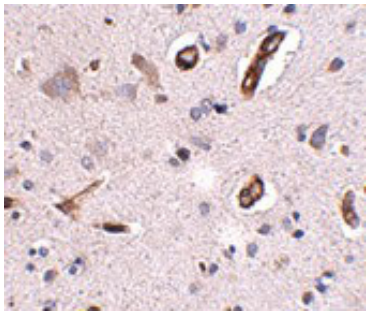
References

Amado M, Almeida R, Schwientek T, et al. Identification and characterization of large galactosyltransferase gene families: galactosyltransferases for all functions. Biochim. Biophys. Acta1999; 1473:35-53.
Nelson PA, Sutcliffe JG, and Thomas EA. A new UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase mRNA exhibits predominant expression in the hypothalamus, thalamus and amygdala for mouse forebrain. Gene Express. Patterns2002; 1:95-9.

Images

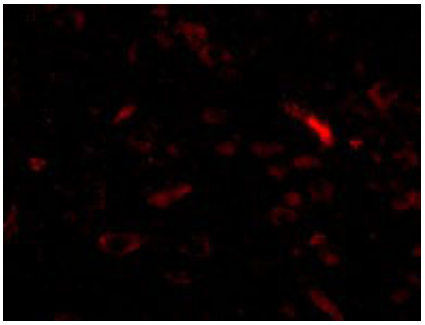


Western blot analysis of GALNT10 in SK-N-SH cell lysate with GALNT10 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of GALNT10 in human brain tissue with GALNT10 antibody at 2.5 µg/mL.

Immunofluorescence of GALNT10 in Human Brain cells with GALNT10 antibody at 20 µg/mL.



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