

GALNT10 Antibody

Catalog # ASC10951

Specification

GALNT10 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF <u>O86SR1</u> NP_938080, <u>38195091</u> Human, Mouse, Rat Rabbit Polyclonal IgG GALNT10 antibody can be used for detection of GALNT10 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

GALNT10 Antibody - Additional Information

Gene ID Target/Specificity GALNT10;

Reconstitution & Storage

GALNT10 antibody can be stored at 4°C for three months and -20°C, 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.

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Precautions

GALNT10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GALNT10 Antibody - 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

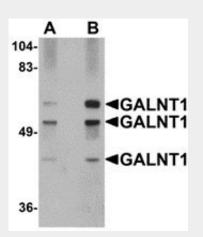


GALNT10 Antibody - Protocols

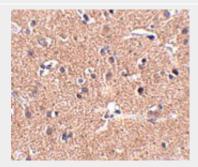
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GALNT10 Antibody - Images

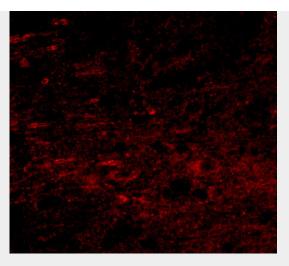


Western blot analysis of GALNT10 in rat brain tissue lysate with GALNT10 antibody at (A) 1 and (B) 2 μ g/mL.



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





Immunofluorescence of GALNT10 in human brain tissue with GALNT10 antibody at 20 μg/mL. GALNT10 Antibody - 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.

GALNT10 Antibody - 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.