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Anti-A4GNT Antibody

Catalog # AP50943

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9UNA3
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39497

Additional Information

Gene ID	51146
Other Names	Alpha-1, 4-N-acetylglucosaminyltransferase; Alpha4GnT
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human A4GNT. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

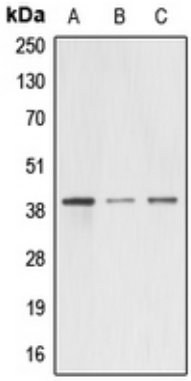
Protein Information

Name	A4GNT (HGNC:17968)
Function	Catalyzes the transfer of N-acetylglucosamine (GlcNAc) residues from UDP-N-acetyl-alpha-D-glucosamine donnors to beta (1->4)- linked or beta-(1->3)-linked galactose residues on O-glycans like core 2 branched O-glycans (PubMed:10430883). Necessary for the synthesis of type III mucin which is specifically produced in the stomach, duodenum, and pancreatic duct (PubMed:10430883). May protect against inflammation-associated gastric adenocarcinomas (By similarity).
Cellular Location	Golgi apparatus membrane; Single- pass type II membrane protein
Tissue Location	Detected in stomach and pancreas.

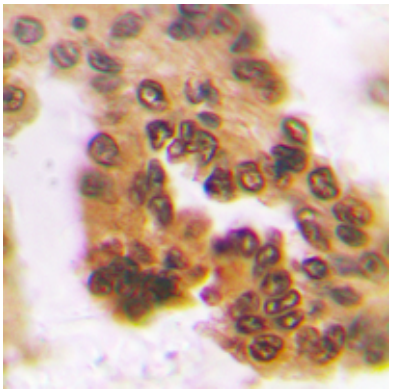
References

Nakayama J.,et al.Proc. Natl. Acad. Sci. U.S.A. 96:8991-8996(1999).

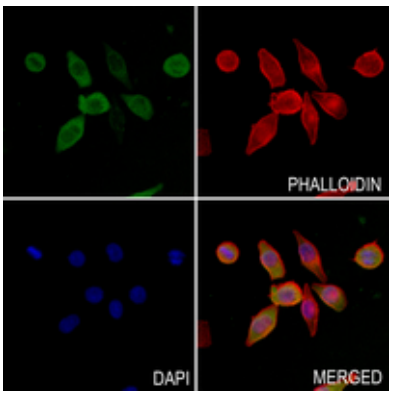
Images



Western blot analysis of A4GNT expression in HEK293T (A), mouse testis (B), rat kidney (C) whole cell lysates. (Predicted band size: 39 kD; Observed band size: 39 kD)



Immunohistochemical analysis of A4GNT staining in human pancreas formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of A4GNT staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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