

# A4GNT Rabbit pAb

A4GNT Rabbit pAb  
Catalog # AP54478

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IF, E
<b>Primary Accession</b>	<a href="#">Q9UNA3</a>
<b>Predicted</b>	Human, Mouse, Rat, Chicken, Dog, Pig, Sheep
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	39497
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human A4GNT
<b>Epitope Specificity</b>	131-180/340
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Golgi apparatus membrane.
<b>SIMILARITY</b>	Belongs to the glycosyltransferase 32 family.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	Alpha 1,4-N-acetylglucosaminyltransferase (Alpha4Gn-T) mediates the biosynthesis of mucin type glycoprotein (O-glycan). Alpha4Gn-T acts as the key enzyme for the formation of the unique glycan GlcNAc $\alpha$ 1-4Gal $\beta$ 1-R, and most efficiently transfers N-acetylglucosamine (GlcNAc) to core 2 branched O-glycans. Alpha4Gn-T is a single-pass type II membrane protein associated with the Golgi apparatus and contains the conserved DXD motif involved in catalytic activity. It is expressed in stomach and pancreas, as well as in gastric cancer cells. Alpha4Gn-T is not expressed in peripheral blood cells, making it a useful biomarker for pancreatic cancer. Alpha4Gn-T and Mucin 6 expression is upregulated in the gastric mucosa of H.pylori infected patients, which suggest the involvement of ?Gn-T in defense against H. pylori infection.

## Additional Information

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<b>Gene ID</b>	51146
<b>Other Names</b>	Alpha-1, 4-N-acetylglucosaminyltransferase, Alpha4GnT, 2.4.1.-, A4GNT
<b>Target/Specificity</b>	Detected in stomach and pancreas.
<b>Dilution</b>	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Protein Information

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

## Background

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Alpha 1,4-N-acetylglucosaminyltransferase (Alpha4Gn-T) mediates the biosynthesis of mucin type glycoprotein (O-glycan). Alpha4Gn-T acts as the key enzyme for the formation of the unique glycan GlcNAc $\alpha$ 1-4Gal $\beta$ 1-R, and most efficiently transfers N-acetylglucosamine (GlcNAc) to core 2 branched O-glycans. Alpha4Gn-T is a single-pass type II membrane protein associated with the Golgi apparatus and contains the conserved DXD motif involved in catalytic activity. It is expressed in stomach and pancreas, as well as in gastric cancer cells. Alpha4Gn-T is not expressed in peripheral blood cells, making it a useful biomarker for pancreatic cancer. Alpha4Gn-T and Mucin 6 expression is upregulated in the gastric mucosa of H.pylori infected patients, which suggest the involvement of ?Gn-T in defense against H. pylori infection.

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