

**GALNT13 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP55117****Specification****GALNT13 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q8IUC8</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GALNT13/GalNAc-T13
Epitope Specificity	351-450/556
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus membrane; Single pass type II membrane protein.
SIMILARITY	Belongs to the glycosyltransferase 2 family. GalNAc-T subfamily. Contains 1 ricin B-type lectin domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

The UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNAc-T) family of enzymes are substrate-specific proteins that catalyze the transfer of GalNAc (N-acetylgalactosamine) to serine and threonine residues onto various proteins, thereby initiating mucin-type O-linked glycosylation in the Golgi apparatus. GalNAc-T13 (Polypeptide N-acetylgalactosaminyltransferase 13), also known as UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 13, is a 556 amino acid protein that displays much stronger enzymatic activity than GalNAc-1 towards GalNAc transfer to mucin peptides such as Muc5a and Muc7. The N-terminal domain is involved in substrate binding and manganese coordination, while the C-terminal domain is involved in UDP-Gal binding and catalytic reaction. With specific expression in the central nervous system, GalNAc-T13 may be responsible for the synthesis of Tn antigen in neuronal cells, which is a universal carcinoma marker on malignant cells.

**GALNT13 Polyclonal Antibody - Additional Information****Gene ID** 114805**Other Names**

Polypeptide N-acetylgalactosaminyltransferase 13, 2.4.1.41, Polypeptide GalNAc transferase 13,

GalNAc-T13, pp-GaNTase 13, Protein-UDP acetylgalactosaminyltransferase 13, UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 13, GALNT13, KIAA1918

### Target/Specificity

Specifically expressed in neuronal cells. Expressed in fetal brain, whole adult brain, cerebral cortex and cerebellum. Not expressed in other tissues tested.

### Dilution

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_E">E~~N/A</span>

### Storage

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.

## GALNT13 Polyclonal Antibody - Protein Information

**Name** GALNT13

**Synonyms** KIAA1918

### Function

Catalyzes the initial reaction in O-linked oligosaccharide biosynthesis, the transfer of an N-acetyl-D-galactosamine (GalNAc) residue from UDP-GalNAc to a serine or threonine residue on the protein receptor (PubMed:<a href="http://www.uniprot.org/citations/12407114" target="\_blank">12407114</a>, PubMed:<a href="http://www.uniprot.org/citations/22186971" target="\_blank">22186971</a>). Generates GalNAc-O-Ser/Thr structure also known as Tn antigen, which itself is immunogenic but also serves as a precursor for the synthesis of different mucin-type O- glycan core structures (PubMed:<a href="http://www.uniprot.org/citations/12407114" target="\_blank">12407114</a>). Contributes to the synthesis of O-linked glycans on mucins and proteoglycans of the central nervous system. May promote neurogenesis through glycosylation and stabilization of PDPN (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/12407114" target="\_blank">12407114</a>, PubMed:<a href="http://www.uniprot.org/citations/22186971" target="\_blank">22186971</a>).

### Cellular Location

Golgi apparatus membrane; Single- pass type II membrane protein

### Tissue Location

Specifically expressed in neuronal cells. Expressed in fetal brain, whole adult brain, cerebral cortex and cerebellum. Not expressed in other tissues tested.

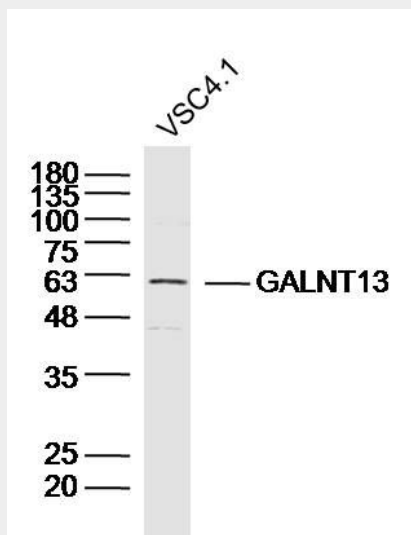
## GALNT13 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **GALNT13 Polyclonal Antibody - Images**



Sample: VSC4.1 Cell (Rat) Lysate at 40 ug  
Primary: Anti-GALNT13(bs-13274R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 64kD  
Observed band size: 62kD