

### **Anti-GALNS Picoband Antibody**

**Catalog # ABO12999** 

# **Specification**

# **Anti-GALNS Picoband Antibody - Product Information**

Application WB, IHC-P, E

Primary Accession P34059
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for GALNS detection. Tested with WB, IHC-P, Direct ELISA in Human; Mouse; Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### **Anti-GALNS Picoband Antibody - Additional Information**

#### **Gene ID 2588**

#### **Other Names**

N-acetylgalactosamine-6-sulfatase, 3.1.6.4, Chondroitinsulfatase, Chondroitinase, Galactose-6-sulfate sulfatase, GalN6S, N-acetylgalactosamine-6-sulfate sulfatase, GalNAc6S sulfatase, GALNS

### **Calculated MW**

58026 MW KDa

### **Application Details**

Western blot, 0.1-0.5  $\mu$ g/ml<br/>br><br/>| Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml<br/>| Direct ELISA, 0.1-0.5  $\mu$ g/ml<br/>| Direct ELISA

#### **Subcellular Localization**

Lysosome.

## **Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<br/><sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

#### Immunogen

E. coli-derived human GALNS recombinant protein (Position: Y181-N289).

### **Cross Reactivity**

No cross reactivity with other proteins.

Storage At -20°C; for one year. After r°Constitution, at 4°C; for one month. It°Can also be



aliquotted and stored frozen at -20°C; for a longer time. Avoid repeated freezing and thawing.

### **Anti-GALNS Picoband Antibody - Protein Information**

**Name GALNS** 

Cellular Location Lysosome.

### **Anti-GALNS Picoband Antibody - Protocols**

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

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

### Anti-GALNS Picoband Antibody - Images



Figure 1. Western blot analysis of GALNS using anti-GALNS antibody (ABO12999). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat small intestine tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GALNS antigen affinity purified polyclonal antibody (Catalog # ABO12999) at 0.5  $\hat{l}\frac{1}{4}$ g/mL overnight at 4 $\hat{A}$ °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an



Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for GALNS at approximately 58KD. The expected band size for GALNS is at 58KD.

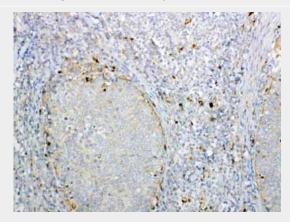


Figure 2. IHC analysis of GALNS using anti-GALNS antibody (ABO12999). GALNS was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $11^1/4$ g/ml rabbit anti-GALNS Antibody (ABO12999) overnight at  $44^\circ$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at  $374^\circ$ C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

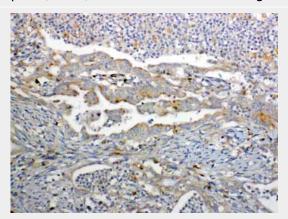


Figure 3. IHC analysis of GALNS using anti-GALNS antibody (ABO12999). GALNS was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $11\frac{1}{4}$ g/ml rabbit anti-GALNS Antibody (ABO12999) overnight at 44°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 374°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

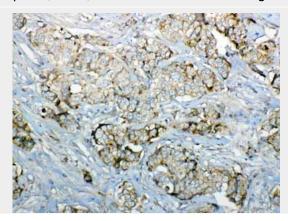
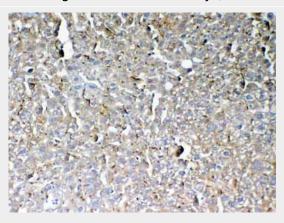
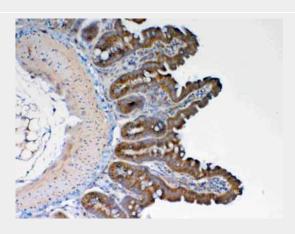




Figure 4. IHC analysis of GALNS using anti-GALNS antibody (ABO12999).







## **Anti-GALNS Picoband Antibody - Background**

N-acetylgalactosamine-6-sulfatase is an enzyme that, in humans, is encoded by the GALNS gene. This gene encodes N-acetylgalactosamine-6-sulfatase which is a lysosomal exohydrolase required for the degradation of the glycosaminoglycans, keratan sulfate, and chondroitin 6-sulfate. Sequence alterations including point, missense and nonsense mutations, as well as those that affect splicing, result in a deficiency of this enzyme. Deficiencies of this enzyme lead to Morquio A syndrome, a lysosomal storage disorder.