

Anti-GALNS Picoband Antibody

Catalog # ABO12999

Product Information

Application	WB, IHC-P, E
Primary Accession	P34059
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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.

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
Application Details	Western blot, 0.1-0.5 μ g/ml Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml Direct ELISA, 0.1-0.5 μ g/ml
Subcellular Localization	Lysosome.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

Protein Information

Name	GALNS
Function	Lysosomal enzyme that hydrolyzes sulfate groups from glycosaminoglycans (GAGs), keratan sulfate (KS) and chondroitin-6- sulfate (C6S).
Cellular Location	Lysosome.

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.

Images

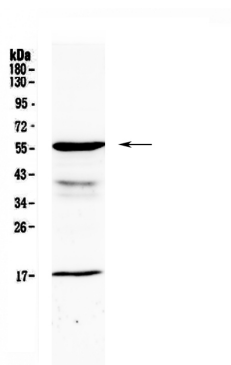


Figure 1. Western blot analysis of GALNS using anti-GALNS antibody (ABO12999). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat small intestine 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 μ g/mL overnight at 4 $^{\circ}$ 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.

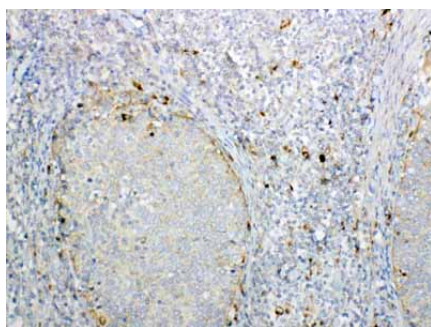
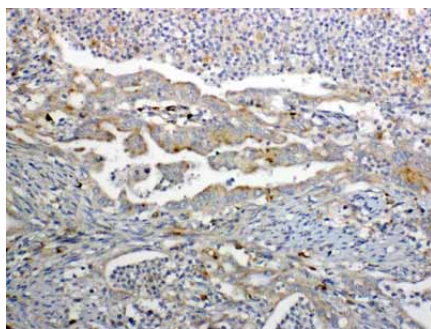


Figure 2. IHC analysis of GALNS using anti-GALNS antibody (ABO12999). GALNS was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-GALNS Antibody (ABO12999) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-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 1 µg/ml rabbit anti-GALNS Antibody (ABO12999) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

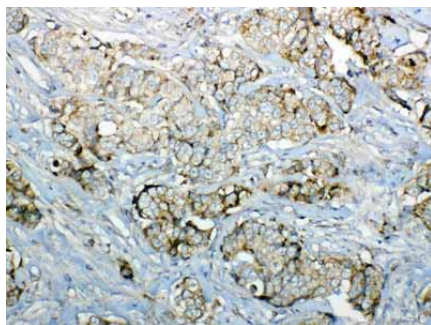
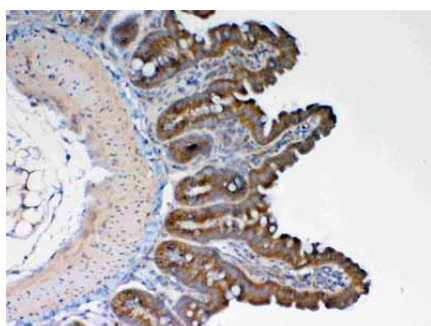
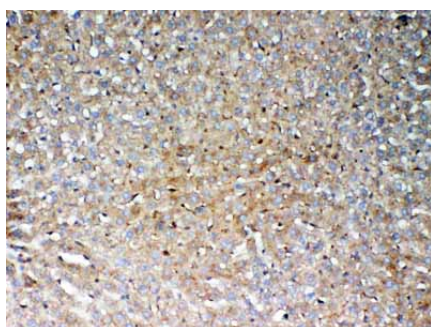
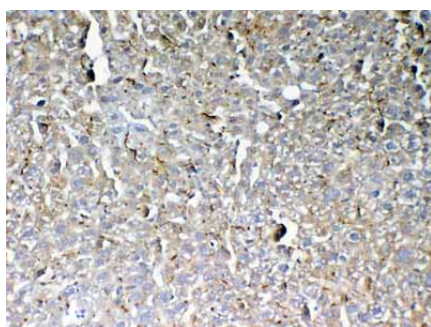


Figure 4. IHC analysis of GALNS using anti-GALNS antibody (ABO12999).



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