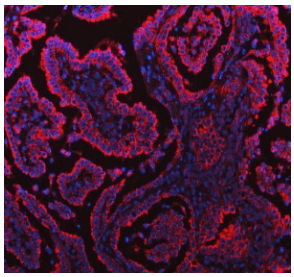
GALNT7 Antibody / O-Glycosylation Enzyme Antibody (FY12126)

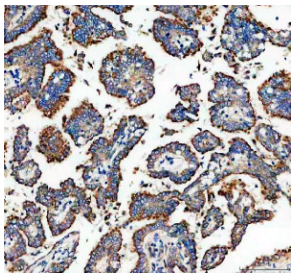
Catalog No.	Formulation	Size
FY12126	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

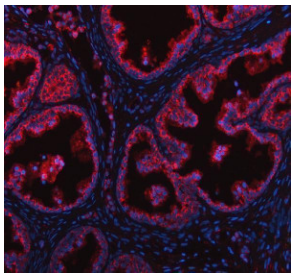
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q86SF2
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Immunoprecipitation: 2ug per 500ug of lysate
Limitations	This GALNT7 Antibody / O-Glycosylation Enzyme Antibody is available for research use only.



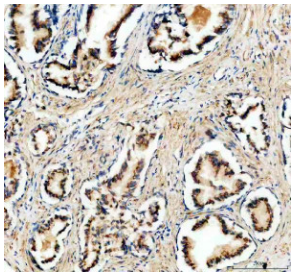
GALNT7 Antibody Human Lung Cancer IF. Immunofluorescence analysis of FFPE human lung cancer tissue using GALNT7 Antibody. Heat induced antigen retrieval was performed in pH 8.0 EDTA buffer prior to overnight incubation with primary antibody (5 ug/mL) at 4Â°C. Cy3-conjugated goat anti-rabbit IgG (red) was used for detection, and DAPI (blue) was used as a nuclear counterstain. Strong cytoplasmic staining with prominent perinuclear enrichment is observed in malignant epithelial cells, consistent with the Golgi localization of GALNT7, an enzyme that initiates mucin-type O-linked glycosylation. These results support the use of GALNT7 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT7 expression, Golgi organization and protein O-glycosylation.



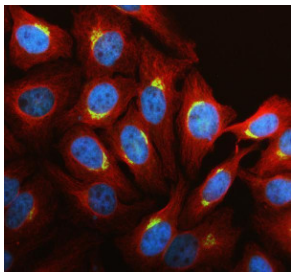
GALNT7 Antibody Human Lung Cancer IHC. Immunohistochemistry analysis of FFPE human lung cancer tissue using GALNT7 Antibody. Heat induced antigen retrieval was performed in pH 8.0 EDTA buffer prior to overnight incubation with primary antibody (2 ug/mL) at 4Â°C. Peroxidase-conjugated goat anti-rabbit IgG and DAB chromogen were used for visualization. Predominantly cytoplasmic staining with focal perinuclear enhancement is observed in malignant epithelial cells, consistent with the Golgi localization of GALNT7, an enzyme that initiates mucin-type O-linked glycosylation. These results support the use of GALNT7 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT7 expression, protein O-glycosylation and cancer-associated glycosylation pathways.



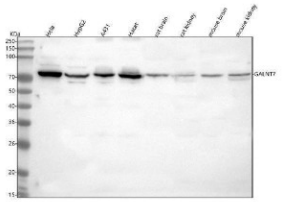
GALNT7 Antibody Human Prostate Cancer IF. Immunofluorescence analysis of FFPE human prostate cancer tissue using GALNT7 Antibody. Heat induced antigen retrieval was performed in pH 8.0 EDTA buffer prior to overnight incubation with primary antibody (5 ug/mL) at 4Â°C. Cy3-conjugated goat anti-rabbit IgG (red) was used for detection, and DAPI (blue) was used as a nuclear counterstain. Strong cytoplasmic staining with prominent perinuclear enrichment is observed in malignant glandular epithelial cells, consistent with the Golgi localization of GALNT7, an enzyme that initiates mucin-type O-linked glycosylation. These results support the use of GALNT7 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT7 expression, Golgi organization and protein O-glycosylation.



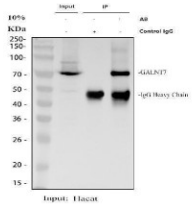
GALNT7 Antibody Human Prostate Cancer IHC. Immunohistochemistry analysis of FFPE human prostate cancer tissue using GALNT7 Antibody. Heat induced antigen retrieval was performed in pH 8.0 EDTA buffer prior to overnight incubation with primary antibody (2 ug/mL) at 4Â°C. Peroxidase-conjugated goat anti-rabbit IgG and DAB chromogen were used for visualization. Predominantly cytoplasmic staining with perinuclear enhancement is observed in malignant glandular epithelial cells, consistent with the Golgi localization of GALNT7, an enzyme that initiates mucin-type O-linked glycosylation. These results support the use of GALNT7 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT7 expression, protein O-glycosylation and cancer-associated glycosylation pathways.



GALNT7 Antibody HeLa Cell IF. Immunofluorescence analysis of HeLa cells using GALNT7 Antibody (green) and alpha tubulin antibody (red). Cells were treated with enzyme antigen retrieval reagent for 15 minutes prior to blocking with goat serum and overnight incubation with GALNT7 Antibody (5 ug/mL) and alpha tubulin antibody at 4Â°C. Fluoro488- and Cy3-conjugated secondary antibodies were used for detection, and DAPI (blue) was used as a nuclear counterstain. GALNT7 displays a concentrated perinuclear staining pattern consistent with Golgi localization, while alpha tubulin highlights the cytoskeletal network. These results support the use of GALNT7 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT7 expression, Golgi organization and protein O-glycosylation.



Western blot analysis of GALNT7 using anti-GALNT7 antibody. Lane 1: human Hela whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: human whole cell lysates, Lane 4: human Hacat whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat kidney tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse kidney tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-GALNT7 antibody at 0.5 ug/ml overnight at 4oC, 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 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A specific band was detected for GALNT7 at approximately 75 kDa. The expected band size for GALNT7 is at 75 kDa.



GALNT7 Antibody HaCaT Cell IP. Immunoprecipitation of GALNT7 from HaCaT whole cell lysate using GALNT7 Antibody, followed by Western blot analysis with the same antibody. Lane 1: HaCaT input lysate (30 ug); Lane 2: rabbit control IgG immunoprecipitation; Lane 3: GALNT7 immunoprecipitation using 2 ug of GALNT7 Antibody from 500 ug of HaCaT lysate. A specific band is detected at approximately 75 kDa in the input and GALNT7 immunoprecipitation samples, while the control IgG lane lacks a corresponding GALNT7 band. The band at approximately 50 kDa represents the IgG heavy chain derived from the immunoprecipitation procedure. These results support the use of GALNT7 Antibody / O-Glycosylation Enzyme Antibody for immunoprecipitation, protein interaction studies and investigations of O-glycosylation pathways.

Description

GALNT7 Antibody / O-Glycosylation Enzyme Antibody detects GALNT7, a member of the polypeptide N-acetylgalactosaminyltransferase family that initiates mucin-type O-linked glycosylation. GALNT7 catalyzes the transfer of N-acetylgalactosamine from UDP-N-acetylgalactosamine to serine and threonine residues on target proteins, generating the first carbohydrate modification required for O-glycan biosynthesis. This essential post-translational modification regulates protein stability, trafficking, protease resistance and cell surface interactions. GALNT7 Antibody / O-Glycosylation Enzyme Antibody is widely used to investigate protein glycosylation, epithelial biology and disease-associated changes in glycan synthesis.

GALNT7 is primarily localized within the Golgi apparatus, where it participates in the highly coordinated process of protein glycosylation before proteins are transported to the cell surface or secreted into the extracellular environment. Although multiple GALNT family members exhibit overlapping substrate specificities, GALNT7 displays unique preferences for particular peptide sequences and contributes to tissue-specific glycosylation patterns. Proper GALNT7 activity is important for the maturation of membrane proteins, receptors, adhesion molecules and mucins that regulate cellular communication and epithelial integrity. Consequently, GALNT7 Antibody / O-Glycosylation Enzyme Antibody provides an important tool for studying Golgi biology and post-translational protein processing.

Abnormal GALNT7 expression or activity has been associated with numerous human diseases, particularly cancer. Altered O-glycosylation can influence tumor cell proliferation, migration, invasion and immune evasion by modifying the structure and function of cell surface glycoproteins. Increased GALNT7 expression has been reported in several malignancies, including colorectal, cervical, ovarian and liver cancers, where it may contribute to tumor progression through dysregulated glycosylation pathways. Because changes in glycan composition frequently accompany malignant transformation, GALNT7 has become an important biomarker for investigations into cancer biology and therapeutic targeting.

Beyond oncology, GALNT7 contributes to normal developmental processes, epithelial homeostasis and regulation of secreted glycoproteins. The enzyme influences numerous biological pathways by modifying proteins involved in cell

adhesion, signal transduction and receptor function. As interest in glycobiology continues to expand, understanding the individual roles of specific GALNT enzymes has become increasingly important for defining how O-linked glycosylation shapes cellular behavior in both health and disease.

NSJ Bioreagents offers GALNT7 Antibody / O-Glycosylation Enzyme Antibody products for researchers studying protein glycosylation, Golgi function, epithelial biology and cancer progression. These antibodies support applications including Western blot, immunohistochemistry, immunofluorescence and flow cytometry for analysis of GALNT7 expression and localization. GALNT7 Antibody / O-Glycosylation Enzyme Antibody provides a valuable tool for investigating mucin-type O-glycosylation, glycoprotein biosynthesis and disease-associated alterations in post-translational protein modification.

Researchers studying protein glycosylation and tumor biology may also be interested in our Cancer Antibodies page, featuring antibodies against glycosyltransferases, signaling proteins and other biomarkers involved in cancer progression, epithelial biology and therapeutic research.

Application Notes

Optimal dilution of the GALNT7 Antibody / O-Glycosylation Enzyme Antibody should be determined by the researcher.

Immunogen

E.coli-derived human GALNT7 recombinant protein (Position: K67-V657) was used as the immunogen for the GALNT7 antibody.

Storage

After reconstitution, the GALNT7 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

GalNAc-T7 antibody, Polypeptide N-Acetylgalactosaminyltransferase 7 antibody, UDP-N-Acetyl-alpha-D-galactosamine:Polypeptide N-Acetylgalactosaminyltransferase 7 antibody, Protein GalNAc Transferase 7 antibody, ppGalNAc-T7 antibody, GALNAC-T7 antibody

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