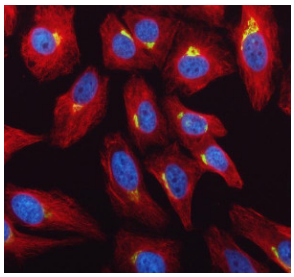
GALNT2 Antibody / O-Glycosylation Enzyme Antibody (FY12958)

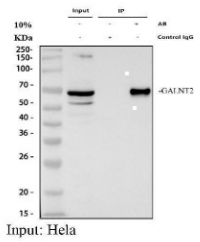
Catalog No.	Formulation	Size
FY12958	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, 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	Q10471
Applications	Western Blot: 0.25-0.5ug/ml Immunoprecipitation: 2-4ug/500ug of lysate ELISA: 0.1-0.5ug/ml Immunofluorescence: 5ug/ml
Limitations	This GALNT2 Antibody / O-Glycosylation Enzyme Antibody is available for research use only.

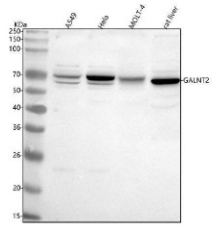


GALNT2 Antibody HeLa Cell IF. Immunofluorescence analysis of HeLa cells using GALNT2 Antibody (green) and alpha tubulin antibody (red). Cells were treated with enzyme antigen retrieval reagent for 15 minutes prior to blocking with goat serum and overnight incubation with GALNT2 Antibody (5 ug/mL) and 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. GALNT2 displays concentrated perinuclear staining consistent with Golgi localization, while alpha tubulin highlights the cytoskeletal network. These results support the use of GALNT2 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT2 expression, Golgi organization and protein O-glycosylation.



Input: Hela

GALNT2 Antibody HeLa Cell IP. Immunoprecipitation of GALNT2 from HeLa whole cell lysate using GALNT2 Antibody, followed by Western blot analysis with the same antibody. Lane 1: HeLa input lysate (30 ug); Lane 2: rabbit control IgG immunoprecipitation; Lane 3: GALNT2 immunoprecipitation using 2 ug of GALNT2 Antibody from 500 ug of HeLa lysate. A specific band is enriched at approximately 65-70 kDa in the GALNT2 immunoprecipitation sample, while no corresponding GALNT2 band is detected in the control IgG lane, confirming specific enrichment of endogenous GALNT2. These results support the use of GALNT2 Antibody / O-Glycosylation Enzyme Antibody for immunoprecipitation, protein interaction studies and investigations of Golgi-associated O-glycosylation pathways.



GALNT2 Antibody Human, Mouse and Rat WB. Western blot analysis using GALNT2 Antibody. Lane 1: human A549 cells; Lane 2: human HeLa cells; Lane 3: human MOLT-4 cells; Lane 4: rat liver tissue lysate. A specific band is detected at approximately 65 kDa in all samples, consistent with the expected molecular weight of GALNT2. The broad expression observed across human cell lines and rat liver tissue is consistent with the widespread distribution of this Golgi-resident glycosyltransferase, which initiates mucin-type O-linked glycosylation of numerous membrane and secreted proteins. These results support the use of GALNT2 Antibody / O-Glycosylation Enzyme Antibody for studying GALNT2 expression, protein O-glycosylation and Golgi-associated protein processing.

Description

GALNT2 Antibody / O-Glycosylation Enzyme Antibody detects GALNT2, a Golgi-resident glycosyltransferase that initiates mucin-type O-linked glycosylation by transferring N-acetylgalactosamine from UDP-N-acetylgalactosamine to serine and threonine residues on target proteins. This first glycosylation step is essential for the biosynthesis of O-linked glycans, influencing protein folding, stability, intracellular trafficking and cell surface function. GALNT2 is widely expressed in epithelial and secretory tissues and plays an important role in maintaining normal protein processing and cellular homeostasis. GALNT2 Antibody / O-Glycosylation Enzyme Antibody is widely used to investigate glycobiology, Golgi function and post-translational protein modification.

GALNT2 belongs to the polypeptide N-acetylgalactosaminyltransferase family, whose members display overlapping yet distinct substrate preferences that generate tissue-specific glycosylation patterns. Localized primarily to the Golgi apparatus, GALNT2 modifies newly synthesized membrane and secreted proteins before they are transported throughout the cell or released into the extracellular environment. Through selective glycosylation of receptors, adhesion molecules, mucins and signaling proteins, GALNT2 regulates protein maturation and numerous cellular processes including proliferation, differentiation and intercellular communication. Consequently, GALNT2 Antibody / O-Glycosylation Enzyme Antibody provides an important tool for studying Golgi organization and protein glycosylation pathways.

Beyond its central role in glycan biosynthesis, GALNT2 has emerged as an important regulator of metabolic and cardiovascular biology. The enzyme glycosylates proteins involved in lipid metabolism, including angiopoietin-like protein 3, thereby influencing plasma triglyceride and high-density lipoprotein cholesterol levels. Human genetic studies have associated GALNT2 variants with altered lipid profiles and increased susceptibility to metabolic disorders, highlighting the importance of O-linked glycosylation in systemic metabolism. Altered GALNT2 expression has also been reported in several cancers, including hepatocellular, gastric, colorectal and oral squamous cell carcinomas, where dysregulated glycosylation may contribute to tumor growth, invasion and metastasis.

As interest in glycobiology continues to expand, GALNT2 has become an important target for understanding how site-specific glycosylation regulates receptor activity, signal transduction and disease progression. Ongoing studies continue to identify novel GALNT2 substrates and define how changes in glycosylation influence cellular behavior in both normal physiology and pathological conditions. These discoveries have increased the value of GALNT2 as both a biomarker and a potential therapeutic target in cancer, metabolic disease and cardiovascular research.

NSJ Bioreagents offers GALNT2 Antibody / O-Glycosylation Enzyme Antibody products for researchers studying protein glycosylation, Golgi biology, metabolism and cancer. These antibodies support applications including Western blot, immunohistochemistry, immunofluorescence, immunoprecipitation and flow cytometry for analysis of GALNT2 expression and localization. GALNT2 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 disease-associated signaling may also be interested in our Cancer Antibodies page, featuring antibodies against glycosyltransferases, signaling proteins and other biomarkers involved in tumor progression, epithelial biology and therapeutic research.

Application Notes

Optimal dilution of the GALNT2 Antibody / O-Glycosylation Enzyme Antibody should be determined by the researcher.

Immunogen

E.coli-derived human GALNT2 recombinant protein (Position: H442-Q571) was used as the immunogen for the GALNT2 antibody.

Storage

After reconstitution, the GALNT2 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-T2 antibody, Polypeptide N-Acetylgalactosaminyltransferase 2 antibody, UDP-N-Acetyl-alpha-D-galactosamine:Polypeptide N-Acetylgalactosaminyltransferase 2 antibody, Protein GalNAc Transferase 2 antibody, ppGalNAc-T2 antibody, GALNAC-T2 antibody

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