Human Polypeptide GalNAc Transferase 3/GALNT3 Alexa Fluor® 700-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF7174N
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Polypeptide GalNac Transferase 3/GALNT3 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) GALNT1 and rhGALNT4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Polypeptide GalNac Transferase 3/GALNT3 Gln38-Asp633 Accession # Q14435
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

O-glycosylation is a ubiquitous post-translational modification present in secreted and membrane-bound proteins. Polypeptide N-acetylgalactosaminyltransferases (GALNTs) calalyze the initial step for O-glycosylation by transferring GalNAc to Thr or Ser residues (GalNAc α1-O-Ser/Thr) in the Golgi compartment. Structurally, the GALNTs consist of an N-terminal catalytic domain tethered by a short linker to a C-terminal ricin-like lectin domain containing three potential carbohydrate-binding sites (1, 2). Twenty distinct GALNT isoforms have been detected in humans. These isoforms display both unique and overlapping substrate specificities (3, 4, 5) with no known universal consensus glycosylation sequence. Glycosylation of mucins results from the successive, often hierarchical, action of several specific GALNTs (6). Expression of GALNT3 appears to be highly regulated and mainly found in pancreas and testis (7). Using a peptide library screening approach, GALNT3 was classified as an intermediate transferase that increases the density of O-linked glycans within the mucin domain following glycosylation with early transferases (5). The enzymatic activity of recombinant human GALNT3 was determined using a phosphatase-coupled assay (8).

PRODUCT SPECIFIC NOTICES

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