

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse Polypeptide GalNAc Transferase 10/GALNT10 in Western blots. In direct ELISA, 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 10/GALNT10 Leu71-Asn603 Accession # Q86SR1
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.
Immunohistochemistry	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

GALNT10 (N-Acetyl-Galactosaminyl Transferase 10; also UDP-Acetylgalactosaminyltransferase 10 and ppGalNAc-T10) is a member of the GalNAc transferase subfamily, glycosyltransferase 2 family of enzymes. It is widely expressed, being found in intestine, pancreas, thyroid and spleen. GALNT10 is found in the Golgi apparatus, and catalyzes the transfer of UDP-GalNAc onto either a Ser or Thr residue on a previously glycosylated peptide/polypeptide backbone. Human GALNT2 is a 603 amino acid (aa) type II transmembrane glycoprotein. It contains an 11 aa N-terminal cytoplasmic region and a 572 aa extracellular domain (aa 32-603). The ECD possesses two key parts, a catalytic region with two catalytic subdomains (aa 144-253 and 311-373), and a ricin B-type lectin domain that binds carbohydrates (aa 458-590). These two distinct domains have unique but complimentary properties. By itself, an active catalytic domain can do no more than place a GalNAc residue immediately adjacent to an existing C-terminal GalNAc residue. Alternatively, if the lectin domain is involved, this domain may recognize (bind to) any number of existing glycosylation sites, allowing for the subsequent attachment of GalNAc by the catalytic site onto a Ser or Thr residue quite distant from the initial lectin domain:CHO recognition site. There are at least three potential splice form variants. One shows a deletion of aa 190-251, a second contains a 13 aa substitution for aa 354-366, and a third possesses a 23 aa substitution for aa 1-352 coupled to a three aa substitution for Asn389. Over aa 71-603, human GALNT10 shares 96% aa sequence identity with mouse GALNT10.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.