

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>        | 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.                                                                             |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Polypeptide GalNAc Transferase 10/GALNT10<br>Leu71-Asn603<br>Accession # Q86SR1                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | 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

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