

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human β -1,3-N-acetylglucosaminyltransferase 2/B3GNT2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human B4GALT1 is observed
Source	Monoclonal Mouse IgG _{2B} Clone # 485327
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human β -1,3-N-acetylglucosaminyltransferase 2/B3GNT2 Lys29-Cys397 Accession # Q9NY97
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	Recombinant Human β -1,3-N-acetylglucosaminyltransferase 2/B3GNT2 (Catalog # 3960-GT)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

β 1,3-Linked GlcNAc residues are present in the backbone of various biologically important glycans which are involved in many essential biological functions such as keratan sulfate synthesis in corneal tissue (1). The addition of such residues are catalyzed by a family of β 1,3-N-acetylglucosaminyltransferases, that includes at least eight members (1-5). All of them are type II Golgi resident transmembrane proteins and have high homology to the β 1,3-galactosyltransferase family.

β 1,3-N-acetylglucosaminyltransferases 2 or β 3GNT2 prefers the substrate lacto-N-neotetraose and is involved in the biosynthesis of poly-N-acetyllactosamine chains (6).

References:

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4. Togayachi, A. *et al.* (2001) *J. Biol. Chem.* **276**:22032.
5. Sasaki, K. *et al.* (1997) *Proc. Natl. Acad. Sci. USA* **94**:14294.
6. Shiraishi, N. *et al.* (2001) *J. Biol. Chem.* **276**:3498.