



Monoclonal Anti-human B3GNT2 Antibody

ORDERING INFORMATION

Catalog Number: MAB3960

Clone: 485327

Lot Number: CBMR01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS
with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human B3GNT2

Immunogen: NS0-derived rhB3GNT2

Ig class: mouse IgG_{2b}

Recommended Application:
Western blot

Other Application:
Direct ELISA

Background

B3GNT2, also known as B3GNT, is a 60 kDa transmembrane Golgi enzyme that catalyzes the transfer of N-acetyl glucosamine from UDP-GlcNAc onto Gal beta 3(GlcNAc beta 6)GalNAc-mucin. It functions in the elongation and branching of O-linked oligosaccharide chains of mucin glycoproteins. Within the luminal domain, human and mouse B3GNT2 share 87% aa sequence identity.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human B3GNT2 (rhB3GNT2; aa 29 - 397; Accession # BC047933). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhB3GNT2 in direct ELISAs and Western blots. In direct ELISAs, this antibody shows no cross-reactivity with rhB4GALT1.

Applications

Western blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human B3GNT2. Using a colorimetric detection system, the detection limit for rhB3GNT2 is approximately 25 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection will increase sensitivity by 5 to 50 fold.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human B3GNT2. The detection limit for rhB3GNT2 is approximately 2 ng/well.

Optimal dilutions should be determined by each laboratory for each application.