

## 32-6749: GALNT1 Human

**Application :** Functional Assay

**Alternative Name :** Polypeptide N-acetylgalactosaminyltransferase 1, GALNT1, GALNAC-T1

### Description

Source: Sf9, Insect cells.

Sterile filtered colorless solution.

Polypeptide N-Acetylgalactosaminyltransferase 1 (Galnt1) is a part of the UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNac-T) family of enzymes. The initial reaction in O-linked oligosaccharide biosynthesis is catalyzed by Galnt1, the transfer of an N-acetyl-D-galactosamine residue to a serine or threonine residue on the protein receptor. Moreover, Galnt1 is implicated in the glycosylation of proteins vital for bone formation for instance osteopontin and bone sialoprotein.

GALNT1 produced in Sf9 Insect cells is a single, glycosylated polypeptide chain containing 528 amino acids (41-559a.a.) and having a molecular mass of 60.4kDa. GALNT1 is expressed with an 9 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** GALNT1 protein solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** ADPGLPAGDV LEPVQKPHEG PGEMGKPVVI PKEDQEKMK E MFKINQFNLM ASEMIALNRS LDPVRLEGCK TKVYPDNLPT TSVVIVFHNE AWSTLLRTVH SVINRSPRHM IEEIVLVDDASERDF LKRP L ESYVKKLKVP VHVIRMEQRS GLIRARLKGA AVSKGQVITF LDAHCECTVGWLEPLLARIK HDRRTVVCP I IDVISDDTFE YMAGSDMTYG GFNWKL NFRW YPVPQREMDRRKGDRTLPVR TPTMAGGLFS IDRDFQEIG TYDAGMDIWG GENLEISFRI WQCGGTLEIVTCSHVGHVFR KATPYTFPGG TGQIINKNNR RLAEVWMDEF KNFFYIISPG VTKVDYGDISSRVGLRHKLQ CKPFSWYLEN IYPDSQIPRH YFSLGEIRNV ETNQCLDNMA RKENEKGIFNCHGMGGNQV FSYTANKEIR TDDLCLDVSK LNGPVTMLKC HHLKGNQLWE YDPVKLT LQHVNSNQCLDKA TEEDSQVPSI RDCNGSRSQQ WLLRNVTLPE IFHHHHHH.

### Application Note

The specific activity which is defined as the amount of enzyme that transfer 1.0 pmole of GalNac from UDP-GalNac to peptide EA2 per minute at pH 8.0 at 37C is > 300 pmol/min/ug.