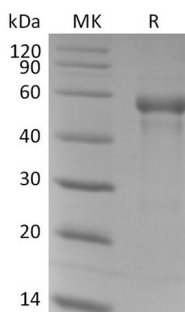


Summary

Name	B3GAT1
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ μ g as determined by LAL test.
Construction	Recombinant Human Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 1 is produced by our Mammalian expression system and the target gene encoding His25-Ile334 is expressed with a 6His tag at the N-terminus.
Accession #	Q9P2W7
Host	Human Cells
Species	Human
Predicted Molecular Mass	36.2 KDa
Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM Citrate, 8% Sucrose, 100mM NaCl, 0.05% Tween 80, pH 6.0.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at \leq -70°C, stable for 6 months after receipt. Store at \leq -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Product Name: Recombinant Human B3GAT1 (N-6His)
Catalog #: PHH2324



Background

Alternative Names

B3GAT1; beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase P); CD57; GlcAT-P; HNK1; NK1; NK-1

Background

B3GAT1 is the key enzyme during the biosynthesis of the carbohydrate epitope HNK-1, which is present on a number of cell adhesion molecules important in neurodevelopment. It adds a glucuronic residue to the terminal lactosamine residue (Gal beta 1-4GlcNAc) of a glycoprotein or glycolipid, which can be further sulfated to become the HNK1 epitope, a unique trisaccharide structure, HSO₃-3GlcA beta 1-3Gal beta 1-4GlcNAc. The enzyme activity was found to be enhanced in the presence of sphingomyelin and phosphatidylinositol. The HNK1 carbohydrate epitope is characteristically expressed on a series of cell adhesion molecules in addition to some glycolipids in the extracellular matrix and on the cell surface in the nervous system, where it is involved in cell-cell and cell-substratum interaction and recognition during the development of the nervous system. Like most known glycosyltransferases, B3GAT1 is a type II Golgi-resident transmembrane protein with a short N-terminal cytoplasmic domain and a single pass transmembrane domain followed by an enzymatic domain in the lumen of Golgi apparatus. The enzyme activity was assayed using a phosphatase-coupled method.

Note

For Research Use Only , Not for Diagnostic Use.