## Human beta-Galactosidase-1 Protein, His Tag (active enzyme)

Catalog # BG1-H52H3



## Synonym

EBP, ELNR1, MPS4B

#### Source

Human beta-Galactosidase-1 Protein, His Tag(BG1-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 24 - Val 677 (Accession # P16278-1).

Predicted N-terminus: Leu 24

#### **Molecular Characterization**

beta-Galactosidase-1(Leu 24 - Val 677) P16278-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 75.5 kDa. The protein migrates as 80-95 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Supplied as 0.2  $\mu m$  filtered solution in 50 mM Tris, 150 mM NaCl, 20% Glycerol, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### **Shipping**

This product is supplied and shipped with dry ice, please inquire the shipping cost.

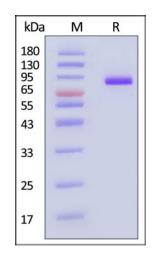
### Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

#### **SDS-PAGE**



Human beta-Galactosidase-1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity**

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl- $\beta$ -D-galactopyranoside. The specific activity is >1,800 pmol/min/ $\mu$ g, as measured under the described conditions(QC tested).

#### **Background**

This gene encodes a member of the glycosyl hydrolase 35 family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature lysosomal enzyme. This enzyme catalyzes the hydrolysis of a terminal beta-linked galactose



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residue from ganglioside substrates and other glycoconjugates. Mutations in this gene may result in GM1-gangliosidosis and Morquio B syndrome. [provided by RefSeq, Nov 2015]

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

