

Recombinant Human Beta-glucuronidase/GUSB protein (His tag)

Catalog No. PDMH100079

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	Beta-glucuronidase;EC 3.2.1.31;Beta-G1;GUSB
Species	Human
Expression Host	HEK293 Cells
Sequence	Met1-Thr651
Accession	P08236
Calculated Molecular Weight	71.5 kDa
Observed molecular weight	80 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

Background

Human beta -Glucuronidase (EC 3.2.1.31) encoded by the GUSB gene is a lysosomal hydrolase involved in the stepwise degradation of glucuronic acid-containing glycosaminoglycans that include heparan sulfate, chondroitin sulfate and hyaluronan. The enzyme is only active on the glucuronic acid of the non-reducing end. The native protein has been reported as a tetrameric glycoprotein composed of identical subunits. Mutations in the GUSB gene are linked to mucopolysaccharidosis type VII. Accumulation of partially degraded glycosaminoglycans, with glucuronic acid residues at the non-reducing termini, are usually found in the lysosomes of patients with the disease. It has also been reported that this enzyme may contribute to the depletion of chondroitin from cartilage and thereby facilitate the damage of joints in rheumatoid arthritis.

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