

Human GBA/glucocerebrosidase Protein

Cat. No. GBA-HM101

Description

Source	Recombinant Human GBA/glucocerebrosidase Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ala40-Gln536.
Accession	NP_000148.2
Molecular Weight	The protein has a predicted MW of 56.69 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

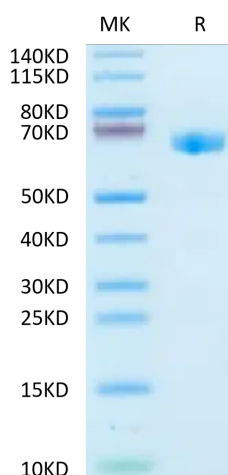
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Glucocerebrosidase (GBA) mutations are the most important genetic risk factor for the development of Parkinson disease (PD). GBA encodes the lysosomal enzyme glucocerebrosidase (GCCase).

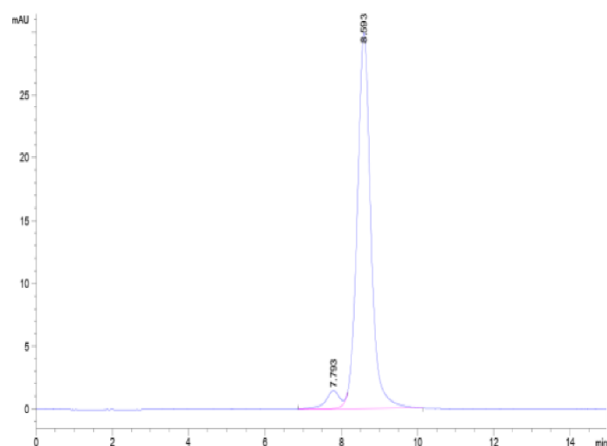
Assay Data

Tris-Bis PAGE



Human GBA on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human GBA is greater than 95% as determined by SEC-HPLC.

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Assay Data

Bioactivity Data

Measured by its ability to hydrolyze 4-methylumbelliferyl-beta-D-glucopyranoside. The specific activity is >200 pmol/min/μg.