Recombinant Human β-Galactosidase/GLB1 Protein (His Tag)

Catalog Number: PKSH033267

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

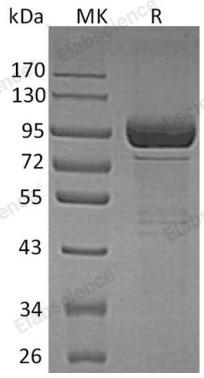
Description

Species	Human
Source	HEK293 Cells-derived Human β-Galactosidase/GLB1 protein Leu24-Val677, with an C-terminal His
Calculated MW	74.6 kDa
Observed MW	90 kDa
Accession	P16278
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 μm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

β Galactosidase is a lysosomal β Galactosidase that hydrolyzes the terminal β Galactose from Ganglioside and Keratan sulfate. In lysosome, the mature β Galactosidase protein associates with Cathepsin A and Neuraminidase 1 to form the lysosomal multienzyme complex. An alternative splicing at the RNA level of β Galactosidase results a catalytically inactive β Galactosidase that plays an important role in vascular development. Defects of β-galactosidase (GLB1) are the cause of diseases like GM1-gangliosidosis which is a lysosomal storage disease and Morquio Syndrome B that cause patients to have abnormal elastic fibers. More than 100 mutations have been identified for β Galactosidase, which result in different residual activities of the mutant enzymes and a spectrum of symptoms in the two related diseases.