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 $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.
Data	
kDa MK	R
170 130 95 72	ence



55 43

34 26

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.