Recombinant Protein Technical Manual

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

RPES3548

Product Data:

Product SKU: RPES3548

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P16278

Protein Information:

Molecular Mass:	74.6 kDa
AP Molecular Mass:	90 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg 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 TrisHCl, 150mM NaCl, pH 8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Beta-Galactosidase; Acid Beta-Galactosidase; Lactase; Elastin Receptor 1; GLB1; ELNR1

Immunogen Information:

Sequence: Leu24-Val677

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.