

Beta-galactosidase, 24-677aa, Human, His tag, Insect cell

Cat.NO.: TP01326

3th Edition

Synonyms:GLB1, EBP, ELNR1, MPS4B

Description:GLB1, also known as beta-galactosidase, is a lysosomal B-galactosidase that hydrolyzes the terminal B-galactose form ganglioside and keratin sulfate. It plays functional roles in the formation of extracellular elastic fibers (elastogenesis) and in the development of connective tissue. It seems to be identical to the elastin-binding protein (EBP), a major component of the non-integrin cell surface receptor expressed on fibroblasts, smooth muscle cells, chondroblasts, leukocytes, and certain cancer cell types. In elastin producing cells, it associates with tropoelastin intracellularly and functions as a recycling molecular chaperone which facilitates the secretions of tropoelastin and its assembly into elastic fibers. Recombinant human GLB1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Form:Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.

Molecular Weight:74.6kDa (662aa), 70-100kDa (SDS-PAGE under reducing conditions.)

Sequences:

LRNATQRMFEIDYSRDSFLKDGQPFRYISGSIHYSRVPRFYWKDRLLKMKMAGLNAIQTYVPWNFHEPWPGQYQF
SEDHDVEYFLRLAHELGLLVILRPGPYICAWEEMGGPLPAWLLEKESILLRSSDPDYLAADVCKWLGVLPLPKMKPLLYQ
NGGPVITVQVENYGSYFACDFDYLRFLQKRFRHHLGDDVVLFTTDTGAHKTFKCGALQGLYTTVDFTGSGNITDA
FLSQRKCEPKGPLINSEFYTGWLDHWGQPHSTIKTEAVASSLYDILARGASVNLVYMFIGGTNFAYWNGANSPYAAQ
PTSVDYDAPLSEAGDLTEKYFALRNIIQKFEKVPEGPPIPPSTPKFAYGKVTLEKLKTVGAALDILCPSPGPIKSLYPLTFI
QVKQHYGFVLYRTTLPQDCSNPAPLSSPLNGVHDRAVVAVDGIPQGVLERNNVITLNTGKAGATLDLLVENMGRV
NYGAYINDFKGLVSNLTLSSNILDWTIFPLDTEDAVRSHLGGWGHRDSGHHDEAWAHNSSNYTLPAFYMGNFSSIP
SGIPDLPQDTFIQFPGWTKGQVWINGFNLGRYWPARGPQLTLFVPQHILMTSAPNTITVLELEWAPCSDDEPELCA
VTFVDRPVIGSSVTYDHPSPKPVKRLMPPPPQKNKDSWLDHVLEHHHHHH

Purity:> 95% by HPLC

Concentration:0.25mg/ml (determined by Absorbance at 280nm)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.