Recombinant human beta -Galactosidase-1/GLB1 protein

Catalog Number: ATGP3290

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
24-677aa

UniProt No.
P16278

NCBI Accession No.
NP_000395.2

Alternative Names
GLB1, EBP, ELNR1, MPS4B

PRODUCT SPECIFICATION

Molecular Weight
74.6 kDa (662aa)

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

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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

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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.

Amino acid Sequence

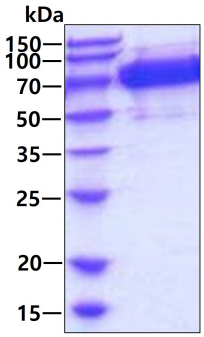
LRNATQRMFE IDYSRDSFLK DGQPFRYISG SIHYSRVPRF YWKDRLLKMK MAGLNAIQTY VPWNFHEPWP GQYQFSEDHD VEYFLRLAHE LGLLVILRPG PYICAEWEMG GLPAWLLEKE SILLRSSDPD YLAAVDKWLG VLLPKMKPLL YQNGGPVITV QVENEYGSYF ACDFDYLRFL QKRFRHHLGD DVVLFTTDGA HKTFLKCGAL QGLYTTVDFG TGSNITDAFL SQRKCEPKGP LINSEFYTGW LDHWGQPHST IKTEAVASSL YDILARGASV NLYMFIGGTN FAYWNGANSP YAAQPTSYDY DAPLSEAGDL TEKYFALRNI IQKFEKVPEG PIPPSTPKFA YGKVTLEKLK TVGAALDILC PSGPIKSLYP LTFIQVKQHY GFVLYRTTLP QDCSNPAPLS SPLNGVHDRA YVAVDGIPQG VLERNNVITL NITGKAGATL DLLVENMGRV NYGAYINDFK GLVSNLTLSS NILTDWTIFP LDTEDAVRSH LGGWGHRDSG HHDEAWAHNS SNYTLPAFYM GNFSIPSGIP DLPQDTFIQF PGWTKGQVWI NGFNLGRYWP ARGPQLTLFV PQHILMTSAP NTITVLELEW APCSSDDPEL CAVTFVDRPV IGSSVTYDHP SKPVEKRLMP PPPQKNKDSW LDHV<LEHHHH HH>

General References

Hofer D., et al. (2009) Hum. Mutat 30:1214-1221.
Kaye E.M., et al. (1997) J. Child Neurol. 12:242-247.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.