

Beta-glucosidase, chloroplastic (GLU1), Recombinant Protein

Cat RP10421

Size 0.5 mg (E-Coli)/ 0.05 mg (Baculovirus)/ 0.5 mg (Yeast)/ 0.05 mg (Mammalian-Cell)/ 1 mg (E-Coli)/ 0.1 mg (Baculovirus)/ 1 mg

(Yeast)/ 0.1 mg (Mammalian-Cell)

Species

Zea mays (Maize)

Full Product Name

Recombinant Zea mays Beta-glucosidase, chloroplastic (GLU1), partial

Product Gene Name

GLU1 recombinant protein

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

64,237 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

Glucoamylase

NCBI Accession

NP_001105454.1

NCBI GI

162462032

NCBI GenBank Nucleotide

NM_001111984.1

NCBI GeneID

542414

NCBI Official Full Name

4-hydroxy-7-methoxy-3-oxo-3,4-dihydro-2H-1,4-benzoxazin-2-yl glucoside beta-D-glucosidase 1, chloroplastic

NCBI Official Symbol

glu1

NCBI Official Synonym Symbols

p60.1; ZmGlu1; GRMZM2G016890

NCBI Protein Information

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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UniProt Gene Name

GLU1

UniProt Synonym Gene Names

ZmGlu1

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UniProt Synonym Protein Names

Beta-D-glucoside glucohydrolase; Beta-glucosidase 1 (EC:3.2.1.21); ZmGlu1

UniProt Primary Accession

P49235

UniProt Related Accession

P49235

UniProt Comments

Is implicated in many functions such as ABA metabolism, hydrolysis of conjugated gibberellins, conversion of storage forms of cytokinins to active forms. Also acts in defense of young plant parts against pests via the production of hydroxamic acids from hydroxamic acid glucosides. Enzymatic activity is highly correlated with plant growth. The preferred substrate is DIMBOA-beta-D-glucoside. Hydrolyzes the chromogenic substrate 6-bromo-2-naphthyl-beta-D-glucoside (6BNGlc) and various artificial aryl beta-glucosides. No activity with cellobiose, arbutin, gentiobiose, linamarin or dhurrin as substrates.

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