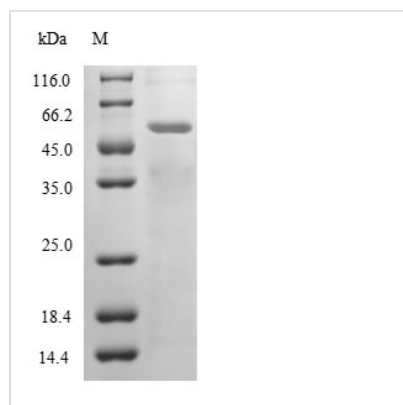




Recombinant Hypocrea rufa Endo-beta-1,6-galactanase (6GAL)

Product Code	CSB-EP762323THZ
Relevance	Hydrolyzes galactooligomers with a degree of polymerization higher than 3. Hydrolyzes radish root arabinogalactan-protein. Does not hydrolyze dextran, arabinan, starch, laminarin, beta-1,4- and beta-1,3-galactans, larch wood arabinogalactan or acid-insoluble polygalacturonic acid.
Abbreviation	Recombinant Hypocrea rufa 6GAL protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q76FP5
Product Type	Recombinant Protein
Immunogen Species	Hypocrea rufa (Trichoderma viride)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	DTTLTIDPTSNWGTWEGWGVSLAWWAKAFGNRDDLASVFFSRNNQAVNGQT LPGLGFNIVRYNAGACSNNSYDGSTMVSPNIKPSRQMDGFWLDWASSDPS SSSWNWNVDANQRAMLQKAKANGANIFELFSNSPMWWWMCNNHNPSGSGSS DNLQSWNYQNHAVYLADIAQHAQQSWRIQFQSVEAFNEPSSSWWTAEGTQE GCHFDVSTMATVIGYLNTELSSRGLSSFVASSDENTYDLAISTWQGFNSSTRNI VKRINVHGYQDGGGRRDTLYSLASQAGKRLWNSEYGDSDASGKSMYQNLLL DFTWLHPTAWVYWQAIDGAGWGLIVGDNDNLTLSSASTKYFVLAQLTRHIRQ GMQILTPDVNTAVAYDAGSQKLIVITANWGSAQTITFDLTRARTAGSNGATV PRWSTQTGGGDQYRSYTDTKINNGKFSASFSSGQVQTFEVSGVVLQ
Research Area	others
Source	E.coli
Target Names	6GAL
Protein Names	Recommended name: Endo-beta-1,6-galactanase EC= 3.2.1.164
Expression Region	21-479aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	56.1kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The gene fragment corresponding to the 21-479aa of the *Hypocrea rufa* 6GAL protein was synthesized, with appropriate restriction sites suitable for in-frame cloning into an expression vector, with N-terminal 10xHis tag. The *E. coli* was transformed with the expression vector, and the clone was expressed upon certain induction. After the induced cell centrifugation, the recombinant protein was purified from the cell extract and presented as N-terminal 10xHis-tagged fusion. Its purity is greater than 85% assayed by SDS-PAGE. The 6GAL protein ran to a band of about 55 kDa molecular weight on the gel.

To date, the research in terms of 6GAL is quite less. There are two references about 6GAL on Uniport: one is "Molecular cloning and expression in *Escherichia coli* of a *Trichoderma viride* endo-beta-(1-->6)-galactanase gene" The other is "Purification and characterization of an endo-beta-(1-->6)-galactanase from *Trichoderma viride*". Besides, the research of 6GAL from the NCBI data also provide some information about 6GAL. In certain article, the putative endo- β -1,6-galactanase gene from *Streptomyces avermitilis* was cloned and expressed in *Escherichia coli*. The enzymatic properties of the recombinant enzyme were characterized. The enzyme produced galactose and a range of β -1,6-linked galacto-oligosaccharides, predominantly β -1,6-galactobiose, from β -1,6-galactan chains. In an early report, it has been found that treatment of larch wood arabinogalactan with the recombinant enzyme indicated that FoGal1 is a β -1,6-galactanase that preferentially debranches β -1,6-galactobiose from the substrate.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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