

Recombinant Enzyme Product Specification Sheet

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| Cat. No.: | PRO-E0407 | add this product to cart |
| LOT: | 2009-0407 | view all isoamylases |
| Activity: | Isoamylase | |
| Synonyms: | Debranching enzyme | |
| Nomenclature: | CAZy [GH13 subf11, glycoside hydrolase family 13 subfamily 11, member of clan GH-H], glgX, glyX, b3431, JW3394 | |
| Source organism: | <i>Escherichia coli</i> str. K-12 substr. W3110 | |
| Enzyme Commission No.: | 3.2.1.68 | |
| Activity: | - } - } | NOTE: this product has been produced and is awaiting assay. It is thus currently available for purchase by the mg only. If you have a query, please contact us (technical@prozomix.com) |
| Specific activity: | | |
| Purity: | > 95 % as judged by SDS-PAGE | |
| Form and storage: | Supplied in 3.2 M ammonium sulphate, store at 4°C (shipped at room temperature) | |
| pH optimum: | - | |
| Temperature optimum: | - | |
| [Protein]: | 10 mg/mL | |
| Sequence length: | 657 amino acids (view sequence) | |
| Accession No.: | P15067 , AP_004360 , NP_417889 | |
| Molecular weight: | 77396.8 Da | (theoretical) |
| | - | (observed by SDS-PAGE) |
| | - | (observed by mass spectrometry) |
| Biological function: | Hydrolysis of (1->6)- α -D-glucosidic branch linkages in glycogen, amylopectin and their β -limit dextrans | |
| Potential application(s): | Carbohydrate research , fundamental research | |
| Comments: | Also readily hydrolyses amylopectin. Differs from EC 3.2.1.41 and EC 3.2.1.142 by its inability to hydrolyse pullulan and by limited action on α -limit dextrans. Maltose is the smallest sugar it can release from an α -(1->6)-linkage | |

Usage: Agitate vial sufficiently to fully homogenise enzyme precipitate before use

Assay: -

Primary sequence:

MTQLAIGKPAPLGAHYDGQGVNFTLFSAHAERVELCVFDANGQEHRYDLPGHSGDIWHGYLPDARPGLRYGYRVH
GPWQPAEGHRFNPAKLLIDPCARQIDGFEKDNPLHAGHNEPDYRDNAAIAPKCVVVDHYDWEDDAPPRTPWGS
TIIYEAHVKGLTYLHPEIPVEIRGTYKALGHPVMINYLKQLGITALELLPVAQFASEPRLQRMGLSNYWGYNPVA
MFALHPAYACSPETALDEFRDAIKALHKAGIEVILDIVLNHSAELDLDGPLFSLRGI DNRSYYWIREDGDYHNWT
GCGNTLNLSPAVVDYASACLRYWVETCHVDGFRFDLAAVMGRTPEFRQDAPLFTAIQNCPVLSQVKLIAEPWDI
APGGYQVGNFPPLFAEWNDFRDAARRFWLHYDLPLGAFAGRFAASSDVFKRNGRLPSAAINLVTAHDGF'LRDC
VCFNHKHNEANGEENRDGTNNNYSNNHGKEGLGGSLLDVERRRDSIHALLTLLLSQGT'PMLLAGDEHGHSQHGN
NNAYCQDNQLTWLDWSQASSGLTAFTAALIH'LRKRI PALVENRWEEGDGNVRWLNRYAQPLSTDEWQNGPKQLQ
ILLSDRFLIAINATLEVTEIVLPAGEWHAI'PPFAGEDNPVITAVWQ'GPAHGLCVFQR

Literature: 1. Hayashi *et al.* (2006) *Mol. Syst. Biol.* **2**, 1-5