

Recombinant Enzyme Product Specification Sheet

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| Cat. No.: | PRO-E0416 |
| LOT: | 2009-0416 |
| Activity: | α -Amylase |
| Synonyms: | Glycogenase |
| Nomenclature: | CAZy [GH13 subf3, glycoside hydrolase family 13 subfamily 3, member of clan GH-H] |
| Source organism: | <i>Rhizobium etli</i> CFN 42 |
| Enzyme Commission No.: | 3.2.1.1 |
| Activity: | - |
| Specific activity: | - |
| Purity: | - |
| Form and Storage: | - |
| pH optimum: | - |
| Temperature optimum: | - |
| [Protein]: | - |
| Sequence length: | 1075 amino acids (view sequence) |
| Accession No.: | ABC94167 |
| Molecular weight: | 125002.4 Da (theoretical) |
| | - (observed by SDS-PAGE) |
| | - (observed by mass spectrometry) |
| Biological function: | Endohydrolysis of (1→4)- α -D-glucosidic linkages in oligosaccharides and polysaccharides |
| Potential application(s): | Fundamental research |
| Comments: | Acts on starch, glycogen and related polysaccharides and oligosaccharides in a random manner; reducing groups are liberated in the α -configuration |
| Usage: | - |

NOTE: this product is currently under development. If you wish to prioritise the production of this enzyme/protein, please follow [this link](#)

Assay:

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Primary sequence:

MLLSAKQGAFSTPPRIYYVNP LLLQGIDAWREVFHGAADTGFDYVLTAPLFD RGGDCSVFTSRDYERLDPELQLG
SAVDDGISRLAEAAEKSGVGLMMDLMLDGKVGDAQAGFRPVDPRRSP LDP AEP MNTIGSERQLRLLGEWTERLWR
LSGLGLSGYRVLGIDRAAPALFKSLIAAVREKADAHFLAWTPGTDFAVRR AIADAGFSGCFSSMAWWD LDERWFV
EEHRVQEALGWQVAFPEPPFARRIAHGTESREILERRAVRALRLAASLGGGLMVMGF EYGAATPLDPTHGDGSG
LRRRLRHDLAFDISSEIRVANAEI GRAGHAHAPSLRLIRNANGPVSALVQSEERDLRCASNVRFV LINRDLRRSAS
APMTALREAASGYLPVAADGAVLRLRAGETRIVESK APEPITSRPPLDVEQAIASPR LAIENIMPRVDDGRFP IK
RVVGEMATVEADIFADGHDP IAAVLLWRPHDAMA EWKEMQLVENDRWRAEFLLERVGRYEF AVEAWKNAFAIF
RYELTKKNDARLDLKLLELQEGNLVRAAKTEAPP AVGADLQALIDSLENASDAERTAILLDPETAELMNKADRRP
FRLRSTTSIDAERKSAAFASWYQIFPRSQSGDPNRHGT FDDVIPRLADIRDMGF DVLYFPPIHP IGT TNRKGRN
NSLKAAPGDPGSPYAI GSEEGGHDAIHPELGD FEDFGR LVEEAGR HGLEIALDLAIQASPDHPWLTEHPGWFDWR
PDGTIKYAENPPK KYEDIVNVDFYTKDALPSLWV ELRDIVQLWVDQGVKLF RVDNPHTKPFPFWEWLIGDIRARH
PEVVFLSEAFTRPKVMYRLAKIGFSQSYTYFTWRNTKWELEQY MREL TETAPKEFFRPHFFVNTHDINPDFLQNA
PRPAFLIRAALAATLSGLGWVYNGFELCEGRPD AKRKEYADSEKYEIRAWDYDRPGNI IAEIRMLNRI R NENTAL
HSHLGLTLLNAWNDNILFFEKASRARDNVLLIAISLDPYNFQESDIE LPLWKWSLDDGAALDAEDLVTGHRFRWN
GKWQRVSFNPQILPFAIWRVRAAEA

Literature:

1. [Gonzalez et al. \(2006\) Proc. Natl. Acad. Sci. U.S.A. 103, 3834-3839](#)