

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0420
LOT:	2009-0420
Activity:	Pullulanase
Synonyms:	Alpha-dextrin endo-1,6- α -glucosidase; amylopectin 6-glucanohydrolase; debranching enzyme; limit dextrinase; pullulan 6-glucanohydrolase
Nomenclature:	CAZy [GH13 subf13, glycoside hydrolase family 13 subfamily 13, member of clan GH-H] <i>pul13B</i>
Source organism:	<i>Cellvibrio japonicus</i> NCIMB 10462
Enzyme Commission No.:	3.2.1.41
Activity:	-
Specific activity:	-
Purity:	-
Form and Storage:	-
pH optimum:	-
Temperature optimum:	-
[Protein]:	-
Sequence length:	1506 amino acids (view sequence)
Accession No.:	ACE82691
Molecular weight:	166286.2 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
Biological function:	Hydrolysis of (1->6)- α -D-glucosidic linkages in pullulan, amylopectin and glycogen, and in the α - and β -limit dextrans of amylopectin and glycogen
Potential application(s):	Fundamental research
Comments:	Different from EC 3.2.1.142 in its action on glycogen, and its rate of hydrolysis of limit dextrans. Its action on amylopectin is complete. Maltose is the smallest sugar that it can release from an α - (1->6)-linkage. Formerly EC 3.2.1.69

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

Usage: -

Assay: -

Primary sequence:

MLKYRNKLGFLFALVGLTALS GCGGGSGTGTDQVNFPKCQDPEVLLPGGQCGLPTEPFVPPACPDGQIRNALGVC
IPSNFPTPVYKPGLENAVIYVNV DGTESERKELLSKYNLHLWQACGGWGN SVTDGKNTNYVIPTTWPNPFPASS
SGEPGAEKPHDPYYGAYFIIPI SADGTCGNFIVKRPDLEPVLQTN DLRLTISRAGGQFDRMVVVVINKDDMRNSI
VSQVPACLR PDCSLERPITTTITGIDAHWIDRDTIVWNKTIDPDYDVVLYQSAEAGMSANTEGDIVGGQALATLSG
ARPMTEEEISRFPHLASYSAYDIPSTTGLDEIKTALKGELILYGRYDSVETETDPVTQEEQEVTVVRGYATRLQT
AGALDDIY TSSDNDAD EATLGVTYTAGGVGVSVWAPTAQNVELRVFSGQPLRLAENIPMQLDVTGTIWHYQGTLA
QLDRKFYRFRVTA FNVAVDQRIRRL EVDTPYSISLATDGRYSQFVNLNDADLKP SGWDEHTVPVAGAPENFVIYEA
HVRDFSAQDESTPKAYRGKYMAFTVADSAPVNLKSLVESGLTHIHLLPTNDGGTVPEGAGSQVNLD SYIFELCQ
RVSNPADLSVCDGSI PNSSKKVSEVIASFDTKTSAAARDLINA IKDIDGFNWGYDPVHYNAP EGSYATDSNGFVRVK
EKRAMIMALHNI GLRTVFDVVYPHTLESGNTSPNSTFDKIVPGYYFR TNVSTGLAENGTGAGSDTATEHRMMAKF
VKDSL VHWTQNYKVDGFRFDQSGYMPKAVLTESYDAVRAIDPDNYFYAEAWN PASPAPERIGLENLATQMSLAGT
GIGTFNDRMRNPLREFQLFKGGSVDAIRAGLAGNLADFKL KAKNGAII SASTVGAYNLDPQEAINYVEKHDNETL
WDMHHPDAIDAGTSIDNRVRMQNITLSIPVLSQGIPIFHMGSDLLRSKSM TADSYNAGDWFNYVDFTKQTNNWA
VGLPPRKEGMPSDAQILSAFN DVNSKPSPEHIEFAGEIFKEMLAIAKNSPLFSLQTAQEVFDRVGFQDGGKSQKA
GVIVMSIDDGAGVVSGTEDVQRADLPALDAMVVVFN GTTTAQTTLTVPTATGFELHDIQKNSVDEIVRNASFAEA
VNDEIGGNFTVPAFTTAVFVKKQAGGQGVGLSAGATLDLPDQEPPPYASDVYVRGNVYDDDWSAVDATRMAYHGR
GIYSVVLDI DARVDAYKFKIAAADWNVPNLGANATVVLGAPLVLNQGGDSSDISINITESGLYRFELDASSSLTA
PTITVVVKEQLNGGTVYLRGNIPEV GWDATTTLNQLSYTGKGIYSVAVDVAAAEDPYSFKIASSDWSTFNFGNGSS
IDLGEEAPVSQGGDNIGLTVSISATYRFELNMQDPAVPTVKVYADNVYSSLPIYIRGNVSSDWGATDANQLAYSG
SGLYTLKLNLAANNSYQFKVAAAADWGALDFGSSNSAVLGT PVNLVAGGSNIGLSIASEGEYVFTLDTANPEALT V
TVDSAD

Literature: 1. [Deboy et al. \(2008\) J. Bacteriol. 190, 5455-5463](#)