

## Recombinant Enzyme Product Specification Sheet

<b>Cat. No.:</b>	PRO-E0419
<b>LOT:</b>	2009-0419
<b>Activity:</b>	Glycogen debranching enzyme
<b>Synonyms:</b>	Pullulanase; limit dextrinase (erroneous); amylopectin 6-glucanohydrolase; bacterial debranching enzyme; debranching enzyme; $\alpha$ -dextrin endo-1,6- $\alpha$ -glucosidase; R-enzyme; pullulan $\alpha$ -1,6-glucanohydrolase; pullulan 6- $\alpha$ -glucanohydrolase
<b>Nomenclature:</b>	<a href="#">CAZy</a> [ <a href="#">GH13</a> subf11, <a href="#">glycoside hydrolase family 13</a> subfamily 11, member of <a href="#">clan GH-H</a> ]
<b>Source organism:</b>	<i>Bradyrhizobium</i> sp. BTAi1
<b>Enzyme Commission No.:</b>	<a href="#">3.2.1.41</a>
<b>Activity:</b>	-
<b>Specific activity:</b>	-
<b>Purity:</b>	-
<b>Form and Storage:</b>	-
<b>pH optimum:</b>	-
<b>Temperature optimum:</b>	-
<b>[Protein]:</b>	-
<b>Sequence length:</b>	691 amino acids ( <a href="#">view sequence</a> )
<b>Accession No.:</b>	<a href="#">ABQ38242</a>
<b>Molecular weight:</b>	81897.5 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
<b>Biological function:</b>	Hydrolysis of (1→6)- $\alpha$ -D-glucosidic linkages in pullulan, amylopectin and glycogen, and in the $\alpha$ - and $\beta$ -limit dextrans of amylopectin and glycogen
<b>Potential application(s):</b>	<a href="#">Fundamental research</a>
<b>Comments:</b>	-
<b>Usage:</b>	-

**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:**

MRLSAGSHARLGATWDGRGTNFALFSANA EKVELCLFDSQGRREIERIE LPERTEDVWHGYLNDVSPGQLYGYRV  
YGPYEPERGHFRFNANKLLLDPYAKRLAGRLVWSDAHFAYRAGSPREDLSFDRRDNARGMPKAVVIDETFNWGRRE  
MRPQIPWEDTIIYEAHVKGLTNRDDVPPNLRGTFGGLSAPAMIKHLKRLGVT TIELLPIHAFIDDRMLVEKKLV  
NYWGYNTISFFAPEQRYAQDNPLDAFRTTVARLHDAGIEVMLDVVYNHTAEGNHLGPTLCYRGIDNASYYWLQPD  
NPRFYDDFTGCGSSVNLTHPRVLQMVDLSRYWVEVCHVDGFRFDLATT LAREKHGFDRRS GFLTAVRQDPVLAG  
VKLVAEPWDVGLGGYQVGAFFPSQWSEWNDRYRSAMRRYWSGEGSLIGEVSSRMTGSSDIFNHDGRTQRASVNHVT  
VHDGFTLADLFSYNSKHNEANGEDNRDGSNDNHSNCGHEGSSDPAINALRRQLRKNQLACFLAQGLPLLLAG  
DEVGNSQSGNNAAYCQDNEVGWVDWSGIGREGDDLTD FIAHMTLRRRFGQIRARRWLDGRRADGSFGVLWLTPS  
AEEMTQTDWTFPDGRFLAYVLAPVEQEQA PIFIVLNAAPEEIGFKLPKLA EYK TWQQVLDTTEIQQKPADFAAGA  
DLKAPPRSVLAYAGVS

**Literature:**

1. [Giraud \*et al.\* \(2007\) \*Science\* 316, 1307-1312](#)