

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0403
LOT:	2009-0403
Activity:	α -Amylase
Synonyms:	4- α -D-Glucan glucanohydrolase; glycogenase; α amylase; endoamylase; Taka-amylase A; 1,4- α -D-glucan glucanohydrolase
Nomenclature:	CAZy [GH13 subf28, glycoside hydrolase family 13 subfamily 28, member of clan GH-H], AmyE, AmyA; BSU03040
Source organism:	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. 168
Enzyme Commission No.:	3.2.1.1
Activity:	-
Specific activity:	-
Purity:	-
Form and storage:	-
pH optimum:	-
Temperature optimum:	-
[Protein]:	-
Sequence length:	619 amino acids (view sequence)
Accession No.:	P00691 , NP_388186.1 , BG10473 , BSUB224308:BSU0305-MON
Molecular weight:	72243.4 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
Biological function:	Endohydrolysis of (1→4)- α -D-glucosidic linkages in polysaccharides containing three or more (1→4)- α -linked D-glucose units
Potential application(s):	Carbohydrate research , fundamental research
Comments:	PDB: 1BAG , 1UA7
Usage:	-
Assay:	-

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

Primary sequence:

LTAPSIKSGTILHAWNWSFNTLKHNMKDIHDAGYTAIQTSPIQVKEGNQGDKSMSNWyWLYQPTSYQIGNRYLG
TEQEFKEMCAAAEEYGIKVIIVDAVINHTTSDYAAISNEVKSIPNwthGNTQIKNWSDRWDVTQNSLLGLYDWNTQ
NTQVQSYLKRFLDRALNDGADGFRFDAAKHIELPDDGSYGSQFwPNI TN TSAEFQYGEILQDSASRDAAyANYMD
VTASNYGHSIRSALKNRNLGVSNI SHYASDV SADKLV TWVESHDTY ANDDEESTWMSDDDIRLGWAVIASRSGST
PLFFSRPEGGNGVRFPGKSQIGDRGSALFEDQAITAVNRFHNVMAGQPEELSNPNNGNNQIFMNQRGSHGVVLAN
AGSSSVSINTATKLPDGRYDNKAGAGSFQVNDGKLTGTINARSVAVLYPDDIAKAPHVFLenYKTGVTHSFNDQL
TITLRADANTTKAVYQINNGPDDRRLRMEINSQSEKEIQFGKTYT IMLKGTNSDGVTRTEKYSFVKRDPASAKTI
GYQNPNHWSQVNAYIYKHdGSRVIELTGSWPGKPMTKNADGIYTLTLPADTDTTNAKVI FNNGSAQVPGQNQPGF
DYVLNGLYND SGLSGSLPH

Literature:

1. [Mäntsälä and Zalkin \(1979\) *J. Biol. Chem.* **254**, 333-340](#)