

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0427
LOT:	2009-0427
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 subf32, glycoside hydrolase family 13 subfamily 32, member of clan GH-H], SCO7020, SC1H10.09, AmlB
Source organism:	<i>Streptomyces coelicolor</i> A3(2)
Enzyme Commission No.:	3.2.1.1
Activity:	-
Specific activity:	-
Purity:	-
Form and Storage:	-
pH optimum:	-
Temperature optimum:	-
[Protein]:	-
Sequence length:	471 amino acids (view sequence)
Accession No.:	Q9L035 , NP_631084.1 , SCOE100226:SCO7020-MON
Molecular weight:	54343.5 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):	Carbohydrate research , 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:	-
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:

SPPGDKDVTAVMFEWKFTSVAQACTDTLGPAGYGYVQVSPPEHEIQGGQWWTSYQPVSYRIAGRLGDRAQFKSMV
DTCHAAGVKVVADSVVNHMSAGNGTGTGGSSYTKYDYPGLYSSNDLDNCTSQINNYGDRFNVQECELVGLADLDT
GEDYVRGKIAGYLNDDLSLGVDFRIDAAKHMAAADLAAIKSRLSNPNVYWKHEAIYGAGEAVSPTEYVGSQDVQ
EFRYARDLKRNVFNGENLAYLKNFGEAWGHLPSDEAAVFVTNHDTERNGETLTYKDGATYTLAHVFMLAWPYGSPD
VHSGYEFTDHDAGPPNGGQVNACYSDGWKCQHAWREISSMVGFRTARGQVTDWWDNGGDQIAFGRGSKAYVAI
NHEGTSLTRTFQTSLPAGDYCDVQTGKGVTVVDGAGRFTATLGAGTAVALHVGARTCDGGDPGDPDPVSSG
VSFAVDATTSWGQNIYVTGNRPELGN

Literature:

1. Bentley *et al.* (2002) *Nature* **417**, 141-147