

## Recombinant Enzyme Product Specification Sheet

<b>Cat. No.:</b>	PRO-E0417
<b>LOT:</b>	2009-0417
<b>Activity:</b>	Amylosucrase
<b>Synonyms:</b>	Sucrose--glucan glucosyltransferase
<b>Nomenclature:</b>	<a href="#">CAZy</a> [ <a href="#">GH13</a> subf4, <a href="#">glycoside hydrolase family 13</a> subfamily 4, member of <a href="#">clan GH-H</a> ]
<b>Source organism:</b>	<i>Caulobacter crescentus</i> CB15
<b>Enzyme Commission No.:</b>	<a href="#">2.4.1.4</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>	584 amino acids ( <a href="#">view sequence</a> )
<b>Accession No.:</b>	<a href="#">AAK23119</a>
<b>Molecular weight:</b>	67052.7 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
<b>Biological function:</b>	Sucrose + ((1->4)- $\alpha$ -D-glucosyl)(n) $\rightleftharpoons$ D-fructose + ((1->4)- $\alpha$ -D-glucosyl)(n+1)
<b>Potential application(s):</b>	<a href="#">Fundamental research</a>
<b>Comments:</b>	-
<b>Usage:</b>	-
<b>Assay:</b>	-

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

**Primary sequence:**

MESRFALKYGADARGPAVLERLKTNLLKAAHARPEFLRALDAARAADPAWLHAPGQTAYTFYVDRFAGDLNGVRG  
KLDYLTELGVRLHPLPLEPRPGSDGGFAVADYRKVDPRLGTIDDLEALAGDLRQRDMGLILDVVCNHTAREH  
AWAAKARAGDPAYRDYYIVLPDAQSAAARDRELIDVFPDTAPGSFTYDAAMGGYVWTTTFYPFQWDLNYANPAVFA  
EMLEVLIFLAAKGAQGFRLLDSAPFLWKQAGTTCRNLPQTYEIVEAWRAALSIVAPGVVLLAEAEIESVEDVLPFFG  
GEESGCNLAYNNVMTALWAALADGDAVIARRCLAVAARKPAQGAWLNYVRCHDDLINWALAAAYAPASDLRRWSN  
AYGNNEGFSRGRAFQTAEGGVVPSTNGMAAALAGLTADADGDCLGARRLRLLYGIHALDGWPLIYMGDEIGLDND  
EAYQDDPLRAGDGRWLHRPQMDWSLAERRGEAGALQADLFATFARLGQRARRLATLGVAGPARPVEVSSPAVLAF  
LRDEGARPFCLVANVSDAPQDFELPPAFAQGAEDVLDGAPSPAGAVSLPPYGITWLVAR

**Literature:** 1. [Nierman \*et al.\* \(2001\) \*Proc. Natl. Acad. Sci. U.S.A.\* \*\*98\*\*, 4136-4141](#)