

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0408
LOT:	2009-0408
Activity:	Sucrose phosphorylase
Synonyms:	Sucrose glucosyltransferase; disaccharide glucosyltransferase; sucrose:phosphate α -D-glucosyltransferase
Nomenclature:	CAZy [GH13 subf18, glycoside hydrolase family 13 subfamily 18, member of clan GH-H]
Source organism:	<i>Escherichia coli</i> str. K-12 substr. W3110
Enzyme Commission No.:	2.4.1.7
Activity:	-
Specific activity:	-
Purity:	-
Form and Storage:	-
pH optimum:	-
Temperature optimum:	-
[Protein]:	-
Sequence length:	559 amino acids (view sequence)
Accession No.:	BAA14886
Molecular weight:	68006.0 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
Biological function:	Sucrose + phosphate = D-fructose + α -D-glucose 1-phosphate
Potential application(s):	Fundamental research
Comments:	In the forward reaction, arsenate may replace phosphate. In the reverse reaction, various ketoses and L-arabinose may replace D-fructose
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:

MKQKITDYLD E I YGGTFTATHLQKLVTRLES AKRLITQRRKKHWDES DVVLITYADQFHSNDLKPLPTFNQFYHQ
WLQSI FSHVHLLPFYPWSSDDGFSVIDYHQVASEAGEWQDIQQLGEC SHLMFDFVCNHMSAKSEWFKNYLQQHPG
FEDFFIAVDPQTDL SAVTRPRALPLLPFQMRDHSTRHLWTTFSDDQIDLNYRSPEVLLAMVDVLLCYLAKGAEY
VRLDAVGFMWKEPGTSCIHLEKTHLIIKLLRSIIDNVAPGTVIITETNVPHKDNIAYFGAGDDEAHMVYQFSLPP
LVLHAVQKQNV EALCAWAQNLTLPSSNTTWFNFLASHDGI GLNPLRGLLPESEI LELVEALQQEGALVNWKNNPD
GTRSPYEINVTYMDALSRRESSDEERCARFILAHAILLSFPGVPAIYIQSILGSRNDYAGVEKLGYNRAINRKKY
HSKEITRELNDEATLRHAVYHELSRLITLRRSHNEFHPDNNFTIDTINSSVMRI PRSNADGNCLTGLFNVSKNIQ
HVNITNLHGRDLISEVDILGNEITLRPWQVMWIK

Literature: 1. [Hayashi et al. \(2006\) Mol. Syst. Biol. 2, 1-5](#)