

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0086
LOT:	2008-0086
Activity:	Trehalose-phosphatase
Synonyms:	Trehalose-6-phosphate phosphatase, trehalose 6-phosphatase, trehalose 6-phosphate phosphatase, trehalose-6-phosphate phosphohydrolase, TPP
Nomenclature:	HAD17, OtsB, ECK1896, b1897, JW1886, EG11752
Source organism:	<i>Escherichia coli K-12 (MG1655)</i>
Enzyme Commission No.:	3.1.3.12
Activity:	<div> <p>NOTE: this product is currently under development. If you wish to prioritise the production of this enzyme, please follow this link</p> </div>
Specific activity:	
Purity:	
Form and storage:	
pH optimum:	
Temperature optimum:	
[Protein]:	-
Sequence length:	266 amino acids (view sequence)
Accession No.:	P31678
Molecular weight:	31338.6 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
Biological function:	Catalyses the dephosphorylation of carbamoyl-phosphate, imido-diphosphate and exhibits a wide specificity for numerous natural sugar phosphates, most notably α,α -trehalose-6-phosphate, but also (in order of increasing specific activity): fructose-6-phosphate, fructose-1-phosphate, glucose-1-phosphate, mannose-6-phosphate, 2-deoxyglucose-6-phosphate and glucose-6-phosphate
Potential application(s):	Biocatalysis , Biochemistry
Comments:	Belongs to the HAD-like hydrolase superfamily
Usage:	-

Assay:

-

Primary sequence:

MTEPLTETPELSAKYAWFFDLDTLAEIKPHPDQVVVPDNIQGLQLLATASDGALALIS
GRSMVELDALAKPYRFPLAGVHGAERRDINGKTHIVHLPDAIARDISVQLHTVIAQYPGA
ELEAKGMAFALHYRQAPQHEDALMTLAQRITQIWPQMALQQGKCVVEIKPRGTSKGEAIA
AFMQEAPFIGRTPVFLGDDLTDSEGFVAVNRLGGMSVKIGTGATQASWRLAGVPDVWSWL
EMITTALQQKRENNRSDDYESFSRSI

Literature:

1. [Kuznetsova et al. \(2006\) J. Biol. Chem. **281**, 36149-36161](#)