

Phosphomannose Isomerase from *Escherichia coli*

Product Information

Cat#	DIA-543
Source	<i>Escherichia coli</i>
Description	High purity recombinant phosphomannose isomerase (<i>Escherichia coli</i>) for use in research, biochemical enzyme assays and in vitro diagnostic analysis.
Form	Suspension
ECNumber	5.3.1.8
Activity	~ 89 U/mg (25 °C, pH 7.6 on mannose 6-phosphate)
CAS No.	9023-88-5
Optimum pH	7.6
Optimum temperature	40 °C
Stability	> 1 year under recommended storage conditions
Unit Definition	One unit of phosphomannose isomerase activity is defined as the amount of enzyme required to release one µmole of fructose 6-phosphate from mannose 6-phosphate (3.14 mM) per minute in the presence of NAD ⁺ at pH 7.6 and 25 °C.
Storage	2–8 °C
Synonyms	Mannose-6-phosphate isomerase; D-mannose-6-phosphate aldose-ketose-isomerase
Buffer	3.2 M ammonium sulphate
Applications	Applications for the measurement of D-mannose in carbohydrate research and in the food and feeds, fermentation, wine, beverage and dairy industries.
Molecular Weight	43915 Da
Concentration	~ 500 U/mL
Specificity	Catalyses the reaction: D-Mannose 6-phosphate = D-fructose 6-phosphate.