Creative Enzymes®

Native E. coli 1-5-Anhydroglucitol-6-Phosphate Dehydrogenase

Cat. No. NATE-0039

Lot. No. (See product label)

Introduction

Applications	Useful for enzymatic determination of 1,5-AG
Synonyms	AG6PDHII; EC 1.1.1.140; 1-5-Anhydroglucitol-6-Phosphate Dehydrogenase

Product Information

Source	Escherichia coli
Appearance	White powder
Form	Freeze dried powder
EC Number	EC 1.1.1.140
CAS No.	37250-69-4
Molecular Weight	78 kDa (TSK gel G 3000 SWXL gel filtration); 40 kDa (SDS–PAGE)
Activity	> 20 U/mg
Contaminants	ATPase < 0.05%; NADPH oxidase < 0.02%
Isoelectric point	pH 4.7
pH Stability	7.0-9.0 (50°C, 30 mins)
Optimum pH	9.0-10.0
Thermal stability	Stable at 42°C and below (pH 9.5, 30 mins)
Optimum temperature	37–50°C
Michaelis Constant	1,5–Anhydroglucitol–6–phosphate 25 mM (pH 10.0); NADP 0.09 mM (pH 10.0)
Unit Definition	One unit is defined as the amount of enzyme which converts 1 µmole of 1,5–AG–6–phosphate to C6H11O8P per minute at 37°C under the conditions specified in the assay procedure.

Storage and Shipping Information

Storage	Storage at-80°C in the presence of a desiccant is recommended.
Stability	Stable for 1 years under the freezing condition (-80°C).