

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)

 $\textbf{\textit{Unit Definition}} \qquad \qquad \text{One unit is defined as the amount of enzyme which converts 1} \ \mu \text{mole of 1,5-AG-6-}$

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.

Stable for 1 years under the freezing condition (-80°C).