

Native Hexokinase (ADP-Dependent) from *Thermococcus litoralis*

Cat. No. NATE-1136

Lot. No. (See product label)

Introduction

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| Description | In enzymology, a ADP-Dependent Hexokinase (EC 2.7.1.147) is an enzyme that catalyzes the chemical reaction: D-Glucose + ADP → D-Glucose-6-phosphate + AMP. |
| Applications | Useful for the enzymatic determination of 1,5 Anhydroglucitol. |
| Synonyms | ADP-dependent glucokinase; ADP-specific glucokinase; ADP:D-glucose 6-phosphotransferase; EC 2.7.1.147 |

Product Information

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| Source | <i>Thermococcus litoralis</i> |
| Appearance | White amorphous powder, lyophilized |
| EC Number | EC 2.7.1.147 |
| CAS No. | 173585-07-4 |
| Molecular Weight | 50 kDa (gel filtration) 50 kDa (SDS-PAGE) |
| Activity | More than 25 U/mg solid |
| Contaminants | NADPH oxidase < 0.01%; ATPase < 0.01% |
| Isoelectric point | 4.1 |
| pH Stability | 6.5–10.5 |
| Optimum pH | 7–7.5 |
| Thermal stability | Stable at 95°C and below |
| Optimum temperature | 100°C |
| Michaelis Constant | Glucose 0.4 mM (at 37°C) ADP 0.057 mM (at 37°C) |
| Activators | Mg ²⁺ |
| Unit Definition | One unit is defined as the amount of enzyme which converts 1 μmole of D-glucose to D-Glucose-6-phosphate per minute at 37°C under the conditions specified in the assay procedure. |

Storage and Shipping Information

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| Storage | Storage at –20°C in the presence of a desiccant is recommended. |
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