

Hexokinase-1 from Human, Recombinant

Cat. No. NATE-0844

Lot. No. (See product label)

Introduction

Description A hexokinase is an enzyme that phosphorylates hexoses (six-carbon sugars), forming hexose phosphate. In most organisms, glucose is the most important substrate of hexokinases, and glucose-6-phosphate the most important product. Hexokinase can transfer an inorganic phosphate group from ATP to a substrate. Hexokinases should not be confused with glucokinase, which is a specific isoform of hexokinase. While other hexokinases are capable of phosphorylating several hexoses, glucokinase acts with a 50-fold lower substrate affinity and its only hexose substrate is glucose.

Synonyms hexokinase type IV glucokinase; hexokinase D; hexokinase type IV; hexokinase (phosphorylating); ATP-dependent hexokinase; glucose ATP phosphotransferase; hexokinase; ATP:D-hexose 6-phosphotransferase; EC 2.7.1.1; 9001-51-8

Product Information

Species Human

Source E. coli

Appearance Sterile filtered colorless solution.

EC Number EC 2.7.1.1

CAS No. 9001-51-8

Molecular Weight 104.6 kDa

Purity Greater than 95.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Activity 7-8 units/ml

Buffer The protein (1mg/ml) contains 20mM Tris pH8.0 and 10% glycerol.

Unit Definition One unit will produce 1.0 umole of NADPH per minute as glucose is phosphorylated by ATP at pH 7.4 at 30°C.

Storage and Shipping Information

Stability Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.