Creative Enzymes®

Native Human Creatine Kinase Total

Cat. No. NATE-0961

Lot. No. (See product label)

Introduction

Description	Creatine kinase plays a key role in the energy metabolism of cells with intermittently high and fluctuating energy requirements. Examples of such cells include cardiac or skeletal muscle cells and neural tissues of brain and retina. The enzyme catalyzes the reversible transfer of the phosphoryl group from phosphorylcreatine to ADP, in order to generate ATP. The molecular mass of the protein is found to be approximately 80 kDa. It is made up of 2 subunits, each having a molecular weight of 40 kDa ± 2000. The lighter subunit is present in larger amounts.
Applications	Diagnostic Controls, Calibrators & Standards; Immunoassays; Clinical Chemistry; Testing/Assay Validation; Life Science; ELISA; Blotting; Cardiac Markers; Manufacturing
Synonyms	EC 2.7.3.2; ATP:creatine phosphotransferase; CK; CPK; MM-CK; MB-CK; BB-CK; creatine phosphokinase; creatine phosphotransferase; phosphocreatine kinase; adenosine triphosphate-creatine transphosphorylase; Mi-CK; CK-BB; CK-MM; CK-MB; CKMiMi; MiMi-CK; 9001-15-4

Product Information

Species	Human
Source	Human Heart/Brain
Form	Lyophilized
EC Number	EC 2.7.3.2
CAS No.	9001-15-4
Activity	> 5 U/mg
Contaminants	LDH: < 1.0% AST/GOT: < 1.0%
Buffer	Tris buffered saline, 1% BSA, 1 mM DTT and 1 mM EDTA
Unit Definition	One unit will catalyze the transphosphorylation of one micromole of phosphate from creatine phosphate to ADP per minute at 37°C. Measured at 340 nm as one equimolar amount of NADH produced by a coupled reaction.

Storage and Shipping Information

Storage	Store at -20°C
Stability	3 years