

## 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  $\pm$  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