

## CKM

## Native Porcine Creatine Kinase

<b>Catalog No.</b>	CSI19647A CSI19647B	<b>Quantity:</b>	25 KU 50 KU
<b>Alternate Names:</b>	CK, CPK, CKM		
<b>Description:</b>	Creatine Kinase (CK) catalyses the conversion of Creatine and consumes Adenosine Triphosphate (ATP) to create Phosphocreatine and Adenosine Diphosphate (ADP). This CK enzyme reaction is reversible, such that also ATP can be generated from PCr and ADP. In tissues and cells that consume ATP rapidly, especially skeletal muscle, but also brain, photoreceptor cells of the retina, hair cells of the inner ear, spermatozoa and smooth muscle, phosphocreatine serves as an energy reservoir for the rapid buffering and regeneration of ATP in situ, as well as for intracellular energy transport by the phosphocreatine shuttle or circuit. Thus creatine kinase is an important enzyme in such tissues. Clinically, creatine kinase is assayed in blood tests as a marker of myocardial infarction (heart attack), rhabdomyolysis (severe muscle breakdown), muscular dystrophy, and in acute renal failure.		
<b>Concentration:</b>	Typically >0.5 mg Protein/mg solid by Coomassie.		
<b>Gene ID:</b>	397264		
<b>Source:</b>	Porcine Heart		
<b>Formulation:</b>	Lyophilized from 20 mM Tris + 1mM DTT + 1mM EDTA.		
<b>Appearance:</b>	Pink to medium brown.		
<b>Biological Activity:</b>	One Unit will transfer one mmole of phosphate from Creatine Phosphate to ADP per minute @ 37°C. Measured at 340 nm as one equimolar amount of NADH produced by a coupled reaction		
<b>Specific Activity:</b>	Typically >200 U/mg @ 37°C		
<b>Storage &amp; Stability:</b>	Store at -20°C. Stable for 2 years from delivery. <b>Avoid repeated freeze-thaw cycles.</b>		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

