

CKM, CKB

Native Porcine Creatine Kinase

Catalog No.	CSI14897A CSI14897B	Quantity:	50 KU 500 KU
Alternate Names:	CK, Creatine Phospho-Kinase, CPK		
Description:	Creatine kinase (CK) is an enzyme that consists of two subunits, which can be either B (brain type) or M (muscle type). Three different isoenzymes exist: CKBB, CKMM, and CKMB. This enzyme is expressed by various tissues and cell types. Heart muscle expresses CKMM at 70%, CKMB at 25-30%. CK catalyzes the conversion of creatine and consumes adenosine triphosphate (ATP) to create phosphocreatine (PCr) and adenosine diphosphate (ADP). This CK enzyme reaction is reversible, so that also ATP can be generated from PCr and ADP. Creatine kinase's clinical significance: detection of heart disease, liver disease, diseases of the central nervous system and thyroid disease.		
UniProt ID:	Q5XLD3 M-type, Q29594 B-type		
Source:	Porcine Heart		
Form:	White lyophilized powder		
Protein Content:	95%		
Protein Purity:	>99%		
Contaminants:	LDH: < 0.005% SGPT: < 0.005% SGOT: < 0.005% Protease: < 0.001 OD/8 min.		
Activity:	>300 U/mg solid by ACA method		
Specific Activity:	>300 U/mg protein		
Unit Definition:	One unit will transfer 1 micromole of phosphate from creatine phosphate to ADP per minute at pH 7.4 and 37°C.		
Solubility:	Soluble in distilled water or dilute buffer.		
Storage & Stability:	Store as supplied at -20°C to -80°C for at least 1 year from date of receipt.		
Country of Origin:	Porcine heart tissue collected from USDA inspected healthy animals from abattoirs located in the USA. Animals received ante and post-mortem inspections under a veterinarian's supervision and were apparently free from infectious and contagious disease.		

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