

Native Pig Creatine Kinase, Muscle

Cat. No. CKM-368P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Native Pig CKM was expressed in porcine heart.
Species	Pig
Source	Porcine Heart
Description	Creatine Kinase (CKM) catalyses the conversion of Creatine and consumes Adenosine Triphosphate (ATP) to create Phosphocreatine and Adenosine Diphosphate (ADP). This CKM 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 <i>in situ</i>, 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.
Concentration	Typically > 0.5mg Protein/mg solid by Coomassie.
Appearance	Pink to medium brown.
Form	Lyophilized from 20mM Tris + 1mM DTT + 1mM EDTA.
Biological Activity	One Unit will transfer one mmole of phosphate from Creatine Phosphate to ADP per

 Tel: 1-631-559-9269 1-516-512-3133

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Minute at 37°C. Measured at 340 nm as one equimolar amount of NADH produced by coupled reaction.

Specific Activity Typically > 200U/mg at 37°C

Storage Store at -20°C. Stable for 2 years from delivery. Avoid repeated freeze-thaw cycles.

Official Symbol CKM

GENE INFORMATION

Gene Name CKM creatine kinase, muscle [*Sus scrofa*]

Synonyms CKM; creatinekinase, muscle; CK; CPK

Gene ID 397264

mRNA Refseq NM_001129949

Protein Refseq NP_001123421

UniProt ID Q5XLD3

Pathway Arginine and proline metabolism; Metabolic pathways

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