Native Pig Creatine Kinase, Muscle

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

SPECIFICATION

Product Overview	Native Pig CKM wasexpressed in porcine heart.
Species	Pig
Source	Porcine Heart
Description	Creatine Kinase(CKM) catalyses the conversion of Creatine and consumes AdenosineTriphosphate (ATP) to create Phosphocreatine and Adenosine Diphosphate (ADP).This CKM enzyme reaction is reversible, such that also ATP can be generatedfrom PCr and ADP. In tissues and cells that consume ATP rapidly, especiallyskeletal muscle, but also brain, photoreceptor cells of the retina, haircells of the inner ear, spermatozoa and smooth muscle, phosphocreatine servesas an energy reservoir for the rapid buffering and regeneration of ATP insitu, as well as for intracellular energy transport by the phosphocreatineshuttle or circuit. Thus creatine kinase is an important enzyme in suchtissues. Clinically, creatine kinase is assayed in blood tests as a marker ofmyocardial infarction (heart attack), rhabdomyolysis (severe musclebreakdown), muscular dystrophy, and in acute renal failure.
Concentration	Typically > 0.5mg Protein/mg solid by Coomassie.
Appearance	Pink to mediumbrown.
Form	Lyophilized from 20mM Tris + 1mM DTT + 1mM EDTA.
Biological Activity	One Unit willtransfer one mmole of phosphate from Creatine Phosphate to ADP per

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	Minute at37°C. Measured at 340 nm as one equimolar amount of NADH produced by acoupled 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.
OfficialSymbol	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 prolinemetabolism; Metabolic pathways

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