



Human type 1 Creatine Kinase MM Isoenzyme (DAG281)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Creatine Kinase MM (CK-MM) Type I Isoenzyme. Recombinant full length Creatine Kinase MM isoenzyme without the C-terminal lysine on both subunits. CK-MM is a 47kDa dimeric protein comprised of 2 identical subunits of Type 1 sequence. Purified in the enzymatic
Antigen Description	Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.
Species	Human
Conjugate	Unconjugated
Applications	Suitable for use in Western blot (major band migrating above 37kDa) and ELISA. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily
Format	Purified, Liquid
Concentration	Lot specific. Activity: Lot specific IU/mg total protein. One unit will transfer one micromole of phosphate from creatine phosphate to ADP per minute at 37°C. Measured at 340nm as one equimolar amount of NADH produced by coupled reaction.
Buffer	0.01M Tris-HCl, 0.075M Sodium chloride, 10mM beta-mercaptoethanol, 50% glycerol, pH 7.0 to 7.5
Preservative	0.1% Sodium Azide
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction

The protein encoded by this gene is a cytoplasmic enzyme involved in energy homeostasis and is an important serum marker for myocardial infarction. The encoded protein reversibly catalyzes the transfer of phosphate between ATP and various phosphogens such as creatine phosphate. It acts as a homodimer in striated muscle as well as in other tissues, and as a heterodimer with a similar brain isozyme in heart. The encoded protein is a member of the ATP:guanido phosphotransferase protein family.

Keywords

Creatine kinase-M; creatine kinase M chain; CKMM; M-CK; CKM; Creatine kinase M-type; creatine kinase, muscle; EC 2.7.3.2
