



Product Datasheet

Product Name	Recombinant Human Creatine Kinase MM Isoenzyme Type-I
Cata No	CB500092
Source	<i>Pichia Pastoris</i> .
Synonyms	Creatine kinase M-type, EC <u>2.7.3.2</u> , Creatine kinase M chain, M-CK, CKM, CKMM, CKMMITI.

Description

Creatine Kinase MM 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. CKMMITI Human Recombinant without C-terminal Lysine on both chains produced in *Pichia Pastoris* is a glycosylated polypeptide chain having an identical amino acid sequence compared to the native enzyme, purified under non-denaturing conditions and reacts with polyclonal antibodies to MM Isoenzyme in ELISA. The CKMMITI is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered colourless liquid formulation.

Biological Activity

The biological activity measured by the enzymatic activity of Creatine phosphokinase procedure No.45-UV, 1IU-1 μ mole creatine phosphate was 500IU/mg at 37 degrees celsius.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein (7.14 mg/ml) contains 0.1M Tris-HCl, 0.075M NaCl, 10mM 2-ME, 50% glycerol, 0.1% sodium azide, pH 7.2.

Stability

CKMMITI although stable at 15°C for 7 days, should be stored desiccated below -18°C.

Please prevent freeze-thaw cycles.