

# CERTIFICATE OF ANALYSIS

## HUMAN TISSUE PROTEIN

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### Creatine Kinase MM

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<b>Code No.</b>	<b>P189-9</b>
<b>Grade</b>	<b>Standard</b>
<b>Lot No.</b>	

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#### RECEIVER INFORMATION

**Expiry Date**

**Manufacture Date**

**Storage Temperature**                      Store below -15°C.

**Storage Notes**

Avoid freeze thaw cycles.

**Shipping Notes**

Cool pack.

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#### PRODUCT INFORMATION

**Source**    Human heart tissue.

**Nominal Purity**                                      > 10%

**Presentation**                                      Single homogenous batch, 0.2µm filtered, supplied lyophilised in 40mM Tris-HCl buffer, pH 7.5, containing 1mM EDTA, 10mM n-Acetyl cysteine.

**Unit Definition**                                      One unit will transfer one micromole of phosphate from Creatine phosphate to ATP per minute at 37°C. Measured at 340nm as one equimolar amount of NADH produced by a coupled reaction.

**Reconstitution Advice**                              Use of water is recommended.  
To ensure full product recovery, it is advised that reconstitution is performed directly into the supplied vial incorporating further washings with the reconstitution buffer.

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#### HEALTH AND SAFETY

**Application**    For Research and Manufacturing Only.

**Infectious Disease Tests**

Starting material tested using FDA approved tests for:	Result
HIV I & II antibodies	
Hepatitis B surface antigen	
Hepatitis C antibodies	

**Precaution**    No test can guarantee the absence of an infectious agent. Please handle as potentially hazardous.

**Material Safety**    For further information and technical details, please download a Safety Data Sheet at [www.bbisolutions.com](http://www.bbisolutions.com) or contact your BBI Account Manager.

**ANALYSIS**

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TESTS	SPECIFICATIONS	RESULTS
<b><u>Determination Method</u></b>		
Enzyme activity recovery calculated for a 100 unit vial as determined by the Dimension analyser.	> 50 U/vial.	U/vial.
Total protein concentration recovery as determined by coomassie.	Report result.	mg/vial.
Specific activity as measured on the Dimension analyser.	> 100 U/mg.	U/mg.
CKBB level as a percentage of CKMM, determined by Helena Laboratories QuickGel CK Vis Isoenzyme System.	< 1.50 %.	%.
Bioburden.	< 100 CFU/ml.	Pass/Fail.
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<b>Physical Appearance</b>	White lyophilised solid.	
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**Purity** Defined as a major band on coomassie stained SDS-PAGE.

<b>Name:</b>		<b>Position:</b>	
<b>Signed:</b>		<b>Date:</b>	