

# Creatine Kinase (CK) Activity Colorimetric Assay Kit

**Cat. No.** Kit-0230    **Lot. No.** (See product label)

## SPECIFICATION

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| <b>Product Overview</b> | The kit can detect creatine kinase activity less than 1 mU. (100 assays) Simple procedure; takes ~ 30-40 minutes; Sensitive and high-throughput adaptable; Kit contains all necessary reagents for measuring creatine kinase activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Size</b>             | 100 assays                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Description</b>      | <p>Creatine Kinase (CK) also known as creatine phosphokinase (CPK) and ATP: creatine N-phosphotransferase is a common cellular enzyme (EC 2.7.3.2). It catalyzes the reversible conversion of creatine and ATP into ADP and phosphocreatine. CK is widely expressed in various tissues and cell types, with highest activity in striated muscles, heart tissue and brain. CK consists of two subunits: M (muscle) and B (brain), and has three isoenzymes: CK-MM (skeleton muscle), CK-MB (cardiac muscle), and CK-BB (brain). Increased CK level is associated with many diseases such as myocardial infarction, muscular dystrophy, pulmonary infarction and brain tumors. Accurate measurement of CK is crucial for early diagnosis, prediction and therapeutic strategy. In Creatine Kinase Activity Colorimetric Assay kit, creatine kinase converts creatine into phosphocreatine and ADP. The generated phosphocreatine and ADP reacts with CK Enzyme Mix to form an intermediate, which reduces a colorless Probe to a colored product with strong absorbance at 450 nm. The CK Activity Assay is high-throughput adaptable, simple and sensitive. This assay kit can detect Creatine Kinase activity less than 1 mU.</p> |
| <b>Applications</b>     | The kit can detect creatine kinase activity less than 1 mU.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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| <b>Usage</b>                   | This product is furnished for LABORATORY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.                                                         |
| <b>Kit Components</b>          | CK Assay BufferCK SubstrateATP (Lyophilized)CK Enzyme Mix (Lyophilized)CK Developer (Lyophilized)NADH Standard (Lyophilized)Positive Control (Lyophilized) |
| <b>Detection method</b>        | Colorimetric                                                                                                                                               |
| <b>Compatible Sample Types</b> | Animal TissueCell Culture SupernatantsPlasmaSerum                                                                                                          |

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