

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Creatine Kinase BB in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 969409
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Creatine Kinase BB Pro2-Lys381 Accession # P12277
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Creatine kinase (CK) catalyzes the conversion of creatine to phosphocreatine (PCr) by consuming adenosine triphosphate (ATP) and generating adenosine diphosphate (ADP). CK reaction is reversible and thus ATP can be generated from PCr and ADP (1). In tissues and cells that consume ATP rapidly, especially skeletal muscle, but also brain, photoreceptor cells of the retina, hair cells of the inner ear, spermatozoa and smooth muscle, PCr serves as an energy reservoir for the rapid buffering and regeneration of ATP in situ, as well as for intracellular energy transport by the PCr shuttle or circuit (2). Clinically, creatine kinase is assayed in blood tests as a marker of myocardial infarction (heart attack), rhabdomyolysis (severe muscle breakdown), muscular dystrophy, autoimmune myositides and acute renal failure. Creatine kinase B (CKB), can form homodimer (BB type), and heterodimer (MB type) with creatine kinase M (CKM). MB type is found in myocardium, and homodimer BB type is found in many tissues, especially brain. The recombinant human CKB is in the BB type and its activity is measured using a phosphatase-coupled method (4).

PRODUCT SPECIFIC NOTICES

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