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Anti-CK1Mt (Tyr153) Antibody

Our Anti-CK1Mt (Tyr153) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is
Catalog # AN1337

Product Information

Application	WB
Primary Accession	P12532
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47037

Additional Information

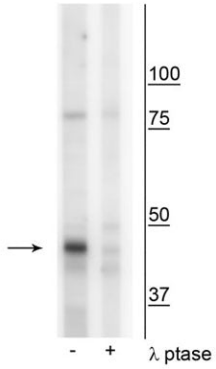
Gene ID	1159;548596
Other Names	Acidic type mitochondrial creatine kinase antibody, CKMT antibody, CKMT1 antibody, CKMT1A antibody, CKMT1B antibody, Creatine kinase mitochondrial 1 ubiquitous antibody, Creatine kinase U type mitochondrial antibody, Creatine kinase ubiquitous mitochondrial antibody, Creatine kinase mitochondrial 1 (ubiquitous) antibody, Creatine kinase mitochondrial 1A antibody, Creatine kinase mitochondrial 1B antibody, Mia CK antibody, U MtCK antibody, Ubiquitous mitochondrial creatine kinase antibody, UMTCK antibody
Target/Specificity	Creatine kinase (CK1) plays an important role transferring phosphate groups from phosphocreatine to ADP in the cytosol of tissues having high, fluctuating energy demands like skeletal muscle, heart, and brain. Mitochondrial CK1, CK1Mt, has two isoforms, sarcomeric CK1Mt and ubiquitous CK1Mt. CK1Mt is localized between the MIM (mitochondrial inner membrane) and MOM (mitochondrial outer membrane) and bound to the cardiolipin-rich inner leaflet (Muller et al., 1985) and along the cristae membranes (Wegmann et al., 1991). CK1Mt exists in two forms; a homo dimer and an octamer consisting of four homodimers. The CK1Mt octamer forms permanent contact sites and maintains a complex structure including porin and ANT (adenine nucleotide translocase) within MIM and MOM (Speer et al, 2005). There have been several phospho-serine, threonine, and tyrosine sites identified within CK1Mt, the role of each one has yet to be determined.
Dilution	WB~~1:1000
Format	Antigen Affinity Purified from Pooled Serum
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-CK1Mt (Tyr153) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping	Blue Ice

Background

Creatine kinase (CK1) plays an important role transferring phosphate groups from phosphocreatine to ADP in the cytosol of tissues having high, fluctuating energy demands like skeletal muscle, heart, and brain. Mitochondrial CK1, CK1Mt, has two isoforms, sarcomeric CK1Mt and ubiquitous CK1Mt. CK1Mt is localized between the MIM (mitochondrial inner membrane) and MOM (mitochondrial outer membrane) and bound to the cardiolipin-rich inner leaflet (Muller et al., 1985) and along the cristae membranes (Wegmann et al., 1991). CK1Mt exists in two forms; a homo dimer and an octamer consisting of four homodimers. The CK1Mt octamer forms permanent contact sites and maintains a complex structure including porin and ANT (adenine nucleotide translocase) within MIM and MOM (Speer et al, 2005). There have been several phospho-serine, threonine, and tyrosine sites identified within CK1Mt, the role of each one has yet to be determined.

Images



Western blot of mouse mitochondria from whole brain lysate showing specific immunolabeling of the ~46 kDa CK1Mt protein phosphorylated at Tyr153 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is greatly decreased by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 minutes).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.