Anti-Phospho-Tyr\textsuperscript{153} CK1Mt Antibody

**Catalog #:** p145-153  
**Size:** 100 µl

**Cite this Antibody:** PhosphoSolutions Cat# p145-153, RRID:AB_2632396

### Host  
Rabbit

### Applications  
WB 1:1000

### Species Tested  
M, H

### Species Reactivity*  
B, C, GP, Ha, NHP, R, Ra, S

### Molecular Reference  
~46 kDa

#### Product Description:  
Affinity purified rabbit polyclonal antibody.

#### Biological Significance:  
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.

#### Antigen:  
Phosphopeptide corresponding to amino acid residues surrounding the phospho-Tyr\textsuperscript{153} of human CK1Mt.

#### Antibody Specificity:  
Specific for endogenous levels of the ~46 kDa CK1Mt protein phosphorylated at Tyr\textsuperscript{153}. Immunolabeling of CK1Mt is greatly decreased by lambda-phosphatase treatment.

#### Purification Method:  
Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.

#### Quality Control Tests:  
Western blots performed on each lot.

#### Packaging:  
100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

#### Storage and Stability:  
Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

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**Application Key:**  
WB = Western Blot  
IF = Immunofluorescence  
IHC = Immunohistochemistry  
IP = Immunoprecipitation

**Species Reactivity Key:**  
All-All Species  
A-Avian  
Amp-Amphibian  
Ar-Arabidopsis  
B-Bovine  
C-Canine  
Ch-Chicken  
D-Drosophila  
GP-Guinea Pig  
H-Human  
Ha-Hamster  
M-Mouse  
NHP- Non-human primate  
P-Pig  
R-Rat  
S-Sheep  
X-Xenopus  
Z-Zebrafish

*Species assumed based on 100% homology with sequence used as antigen

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General References:

