

CK1Mt (Tyr153) Antibody

Rabbit Polyclonal Antibody Catalog # AN1262

Specification

CK1Mt (Tyr153) Antibody - Product Information

Application WB
Primary Accession P12532

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 47037

CK1Mt (Tyr153) Antibody - Additional Information

Gene ID 1159
Gene Name CKMT1A

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr153 conjugated to KLH

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

CK1Mt (Tyr153) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

CK1Mt (Tyr153) Antibody - Protocols

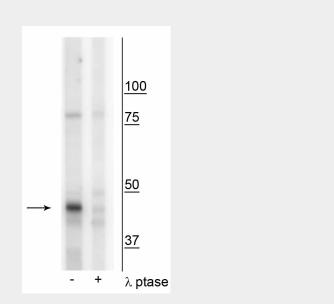
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



- Flow Cytomety
- Cell Culture

CK1Mt (Tyr153) Antibody - Images



Western blot of mouse mitochondria from whole brain lysate showing specific immunolabeling of the $\sim\!46$ 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).

CK1Mt (Tyr153) Antibody - 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.