



Recombinant Protein Technical Manual

Recombinant Human CKMT1A Protein (His Tag)

RPES0743

Product Data:

Product SKU: RPES0743

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P12532

Protein Information:

Molecular Mass: 45.3 kDa

AP Molecular Mass: 43 kDa

Tag: N-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as sterile 20mM Tris, 500mM NaCl, pH 8.5, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CKMT;CKMT1;CKMT1A

Immunogen Information:

Sequence: Ala 40-His 417

Background:

CKMT1A belongs to the ATP:guanido phosphotransferase family. It contains 1 phosphagen kinase C-terminal domain and 1 phosphagen kinase N-terminal domain. CKMT1A gene is one of two genes which encode the ubiquitous mitochondrial creatine kinase (CKMT1). CKMT1 is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK (CKMT2) and ubiquitous MtCK, encoded by separate genes. CKMT1 occurs in two different oligomeric forms: dimers and octamers, in contrast to the exclusively dimeric cytosolic creatine kinase isoenzymes. Ubiquitous mitochondrial creatine kinase has 80% homology with the coding exons of sarcomeric CKMT1.