

Recombinant Mouse Creatine Kinase U-type, Mitochondrial (Ckmt1a), N-His

Cat. No.: AP4C168

Product Type: Animal Proteins

Size: 10 µg; 50 µg; 200 µg; 1 mg; 5 mg

Product Overview

BioVenic's Recombinant Mouse Creatine Kinase U-type, Mitochondrial (Ckmt1a), N-His is a recombinant protein expressed from *E. coli*. Its predicted molecular weight is 27.5 kDa. The purity is >97%.

Specifications

Type	Recombinant Protein
Species	Mouse
Expression System	<i>E. coli</i>
Purity	>97%
Endotoxin	< 1.0 EU/µg
Predicted Molecular Weight	27.5 kDa
Physical State	Lyophilized
Formulation	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Target Information

Mouse Creatine Kinase U-type, Mitochondrial (Ckmt1a) is a mitochondrial enzyme that plays a crucial role in energy metabolism. It catalyzes the reversible transfer of a phosphate group between creatine and adenosine diphosphate (ADP), generating creatine phosphate and adenosine triphosphate (ATP). This enzyme is particularly important in tissues with high and fluctuating energy demands, such as the brain and muscles. Ckmt1a helps maintain energy homeostasis by storing energy in the form of creatine phosphate, which can be rapidly utilized to regenerate ATP when energy demand increases. Additionally, Ckmt1a may play a role in protecting cells from oxidative stress and apoptosis.

Protein	Mouse Creatine Kinase U-type, Mitochondrial (Ckmt1a)
Protein Synonym	Acidic-type mitochondrial creatine kinase; Ubiquitous mitochondrial creatine kinase
EC No.	A0A6P5PCH0

Shipping and Storage

This product is shipped with ice packs. Lyophilized protein can be stored at -80°C for 1 year. After reconstitution, the protein solution can be stored at 2-8°C for 2-7 days.

User Note

Always centrifuge tubes before opening. Avoid mixing by vortexing or pipetting. Reconstitute in 10 mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Aliquot the reconstituted solution to minimize freeze-thaw cycles.

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.