

Mouse Anti-Porcine Mitochondrial Creatine Kinase (uMtCK) Monoclonal Antibody

Cat. No.: VD8N176

Product Type: Animal-targeted Antibodies

Size: 50uL; 100uL

Product Overview

BioVenic mouse monoclonal antibody is specific for porcine mitochondrial creatine kinase. It can be applied to WB assay of porcine mitochondrial creatine kinase.

Specifications

Application	WB
Clonality	Monoclonal
Classification	Primary Antibody
Clone	G4N39
Host	Mouse
Target Species	Porcine
Species Reactivity	Porcine
Specificity	Porcine Mitochondrial Creatine Kinase
Isotype	IgG
Immunogen	Purified recombinant porcine mitochondrial creatine kinase protein fragments
Concentration	1 mg/mL
Conjugation	Unconjugated
Physical State	Liquid

Target Information

Mitochondrial creatine kinase (uMtCK), also known as ubiquitous mitochondrial creatine kinase, is an enzyme that plays a pivotal role in energy metabolism within the mitochondria of cells. This isoform of creatine kinase is found across various tissues, including heart and skeletal muscle, where it helps maintain energy homeostasis by catalyzing the transfer of a high-energy phosphate group from phosphocreatine to ADP, thereby generating ATP. uMtCK is particularly crucial during periods of high energy demand, such as muscle contraction or intense physical activity. Its function ensures that ATP is efficiently produced to meet the cell's immediate energy needs, supporting the cell's ability to perform work.

Target	Porcine Mitochondrial Creatine Kinase
Target Synonym	CKMT1A
Gene ID	100519994
UniProt ID	F1SI77

Shipping and Storage

This product is shipped with ice gel packs. Store at -20°C (up to 12 months) on receipt. Avoid repeated freezing and thawing as this may denature the antibody.

Reference

Meyer, Laudiene Evangelista, *et al.* "Mitochondrial creatine kinase activity prevents reactive oxygen species generation: antioxidant role of mitochondrial kinase-dependent ADP re-cycling activity." *Journal of Biological Chemistry* 281.49 (2006): 37361-37371.

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.