

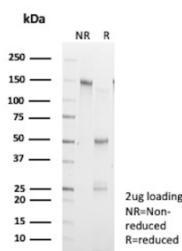
CKM Antibody / Creatine kinase M-type [clone CKMM/13033R] (V5858)

Catalog No.	Formulation	Size
V5858-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5858-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5858SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CKMM/13033R
UniProt	P06732
Localization	Cytoplasm
Applications	ELISA :
Limitations	This CKM/Creatine kinase M-type antibody is available for research use only.



SDS-PAGE Analysis of Purified CKM/Creatine kinase M-type antibody (clone CKMM/13033R). Confirmation of Purity and Integrity of Antibody.

Description

CKM antibody targets Creatine kinase M-type, a cytosolic enzyme encoded by the CKM gene that catalyzes the reversible transfer of a phosphate group between ATP and creatine, generating phosphocreatine and ADP. Creatine kinase M-type is a key component of the phosphagen system that buffers intracellular ATP levels in cells with high and rapidly changing energy demands. This isoform represents the muscle-type creatine kinase and is highly expressed in skeletal muscle fibers and cardiomyocytes, where efficient energy transfer is essential for contraction and cellular

homeostasis. CKM antibody is therefore commonly used in research focused on muscle metabolism, bioenergetics, and creatine kinase system regulation.

Creatine kinase M-type functions primarily as a homodimer but can also form heterodimers with the brain-type creatine kinase subunit, resulting in the CK-MB isoenzyme. The protein belongs to the creatine kinase family and contains conserved catalytic domains required for creatine binding and phosphotransfer activity. In addition to mature muscle tissue, CKM expression has been reported during myogenic differentiation and muscle regeneration, supporting its role in muscle development and repair. Clone CKMM/13033R is designed to recognize Creatine kinase M-type for research use in studies examining muscle-associated energy metabolism and creatine kinase dynamics.

Alterations in Creatine kinase M-type expression or activity have been investigated in a variety of pathological contexts, including muscular dystrophies, myopathies, cardiac injury, and metabolic stress conditions. Changes in CKM levels are commonly associated with muscle damage and impaired energy handling, reflecting disruption of phosphocreatine-dependent ATP buffering. Because the creatine kinase system is central to muscle performance, fatigue resistance, and recovery, CKM remains an important research target in studies of muscle physiology, disease mechanisms, and metabolic adaptation. Clone CKMM/13033R provides a tool for examining Creatine kinase M-type expression and distribution in experimental systems relevant to skeletal and cardiac muscle biology.

Application Notes

1. Optimal dilution of the CKM/Creatine kinase M-type antibody should be determined by the researcher.
2. This CKM/Creatine kinase M-type antibody is recombinantly produced by expression in human HEK293 cells.

Immunogen

Recombinant human CKM protein was used as the immunogen for the CKM/Creatine kinase M-type antibody.

Storage

CKM/Creatine kinase M-type antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.