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DMPK Polyclonal Antibody
Catalog # AP69546

Specification

DMPK Polyclonal Antibody - Product Information

Application	**WB**
Primary Accession	Q09013
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**

DMPK Polyclonal Antibody - Additional Information

Gene ID 1760

Other Names
DMPK; DM1PK; MDPK; Myotonin-protein kinase; MT-PK; DM-kinase; DMK; DM1 protein kinase; DMPK; Myotonic dystrophy protein kinase

Dilution
WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

DMPK Polyclonal Antibody - Protein Information

Name DMPK

Synonyms DM1PK, MDPK

Function
Non-receptor serine/threonine protein kinase which is necessary for the maintenance of skeletal muscle structure and function. May play a role in myocyte differentiation and survival by regulating the integrity of the nuclear envelope and the expression of muscle-specific genes. May also phosphorylate PPP1R12A and inhibit the myosin phosphatase activity to regulate myosin phosphorylation. Also critical to the modulation of cardiac contractility and to the maintenance of proper cardiac conduction activity probably through the regulation of cellular calcium homeostasis. Phosphorylates PLN, a regulator of calcium pumps and may regulate sarcoplasmic reticulum calcium uptake in myocytes. May also phosphorylate FXYD1/PLM which is able to induce chloride currents. May also play a role in synaptic plasticity.

Cellular Location
Endoplasmic reticulum membrane; Single-pass type IV membrane protein; Cytoplasmic side. Nucleus outer membrane; Single-pass type IV membrane protein; Cytoplasmic side Mitochondrion

outer membrane; Single-pass type IV membrane protein. Sarcoplasmic reticulum membrane. Cell membrane. Cytoplasm, cytosol. Note=Localizes to sarcoplasmic reticulum membranes of cardiomyocytes. [Isoform 3]: Mitochondrion membrane.

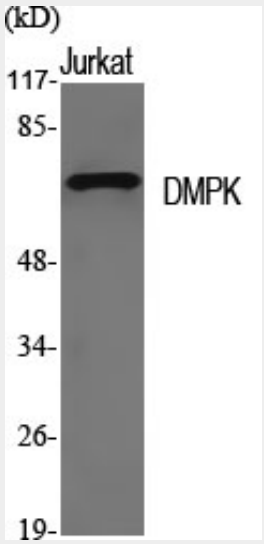
Tissue Location
Most isoforms are expressed in many tissues including heart, skeletal muscle, liver and brain, except for isoform 2 which is only found in the heart and skeletal muscle, and isoform 14 which is only found in the brain, with high levels in the striatum, cerebellar cortex and pons.

DMPK Polyclonal 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

DMPK Polyclonal Antibody - Images



Western Blot analysis of various cells using DMPK Polyclonal Antibody

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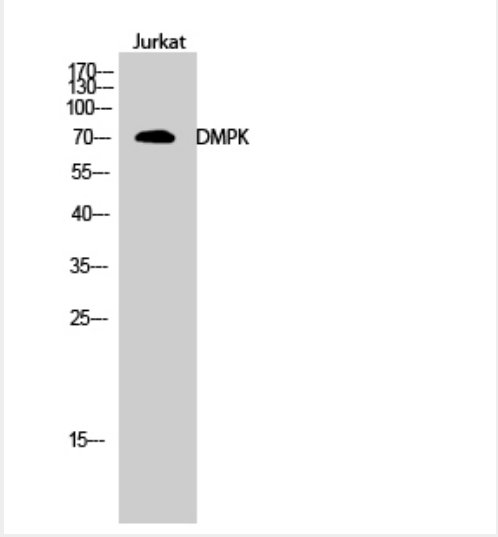

Western Blot analysis of Jurkat cells using DMPK Polyclonal Antibody

DMPK Polyclonal Antibody - Background

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