

**Mouse Dmpk Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14773a****Specification**

---

**Mouse Dmpk Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P54265](#)**Mouse Dmpk Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 13400**Other Names**

Myotonin-protein kinase, MT-PK, DM-kinase, DMK, DMPK, Myotonic dystrophy protein kinase, MDPK, Dmpk, Dm15, Mdpk

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Mouse Dmpk Antibody (N-term) Blocking Peptide - Protein Information****Name** Dmpk**Synonyms** Dm15, 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 FXD1/PLM which is able to induce chloride currents. May also play a role in synaptic plasticity.

**Cellular Location**

Sarcoplasmic reticulum membrane. Cell membrane. Note=Localizes to sarcoplasmic reticulum membranes of cardiomyocytes [Isoform 8]: Mitochondrion outer membrane; Single-pass type IV membrane protein

**Tissue Location**

Expressed in all tissues tested, with a predominance in brain, skeletal muscle, heart, and other tissues containing smooth muscle. In the heart, expression is restricted to the cardiomyocytes in the ventricle and atrium

**Mouse Dmpk Antibody (N-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**Mouse Dmpk Antibody (N-term) Blocking Peptide - Images****Mouse Dmpk Antibody (N-term) Blocking Peptide - Background**

Critical to the modulation of cardiac contractility and to the maintenance of proper cardiac conduction activity. Phosphorylates phospholamban.

**Mouse Dmpk Antibody (N-term) Blocking Peptide - References**

Matynia, A., et al. PLoS ONE 5 (3), E9857 (2010) :Llagostera, E., et al. FEBS Lett. 583(12):2121-2125(2009)Oude Ophuis, R.J., et al. PLoS ONE 4 (11), E8024 (2009) :Harmon, E.B., et al. Dev. Dyn. 237(9):2353-2366(2008)Dansithong, W., et al. PLoS ONE 3 (12), E3968 (2008) :