

# Datasheet for ABIN7563445

## DMPK Protein (AA 1-631) (His tag)



#### Overview

Quantity:	1 mg
Target:	DMPK
Protein Characteristics:	AA 1-631
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DMPK protein is labelled with His tag.

#### **Product Details**

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Purpose:	Custom-made recombinant Dmpk Protein expressed in mammalian cells.
Sequence:	MSAEVRLRQL QQLVLDPGFL GLEPLLDLLL GVHQELGASH LAQDKYVADF LQWVEPIAAR
	LKEVRLQRDD FEILKVIGRG AFSEVAVVKM KQTGQVYAMK IMNKWDMLKR GEVSCFREER
	DVLVKGDRRW ITQLHFAFQD ENYLYLVMEY YVGGDLLTLL SKFGERIPAE MARFYLAEIV
	MAIDSVHRLG YVHRDIKPDN ILLDRCGHIR LADFGSCLKL QPDGMVRSLV AVGTPDYLSP
	EILQAVGGGP GAGSYGPECD WWALGVFAYE MFYGQTPFYA DSTAETYAKI VHYREHLSLP
	LADTVVPEEA QDLIRGLLCP AEIRLGRGGA GDFQKHPFFF GLDWEGLRDS VPPFTPDFEG
	ATDTCNFDVV EDRLTAMVSG GGETLSDMQE DMPLGVRLPF VGYSYCCMAF RDNQVPDPTP
	MELEALQLPV SDLQGLDLQP PVSPPDQVAE EADLVAVPAP VAEAETTVTL QQLQEALEEE
	VLTRQSLSRE LEAIRTANQN FSSQLQEAEV RNRDLEAHVR QLQERMEMLQ APGAAAITGV
	PSPRATDPPS HLDGPPAVAV GQCPLVGPGP MHRRHLLLPA RIPRPGLSEA RCLLLFAAAL
	AAAATLGCTG LVAYTGGLTP VWCFPGATFA P Sequence without tag. The proposed
	Purification-Tag is based on experiences with the expression system, a different complexity

	of the protein could make another tag necessary. In case you have a special request, please
	contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>
	State-of-the-art algorithm used for plasmid design (Gene synthesis).
	This protein is a made-to-order protein and will be made for the first time for your order. Our
	experts in the lab try to ensure that you receive soluble protein.
	If you are not interested in a full length protein, please contact us for individual protein
	fragments.
	The big advantage of ordering our made-to-order proteins in comparison to ordering custom
	made proteins from other companies is that there is no financial obligation in case the protein
	cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC
Grade:	custom-made
Target Details	
Target:	DMPK
Alternative Name:	Dmpk (DMPK Products)
Background:	Myotonin-protein kinase (MT-PK) (EC 2.7.11.1) (DM-kinase) (DMK) (DMPK) (Myotonic
	dystrophy protein kinase) (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

### Target Details

Expiry Date:

12 months

	myocytes. May also phosphorylate FXYD1/PLM which is able to induce chloride currents. May also play a role in synaptic plasticity. {ECO:0000269 PubMed:12612014, ECO:0000269 PubMed:15598648, ECO:0000269 PubMed:18729234,
	ECO:0000269 PubMed:21949239, ECO:0000269 PubMed:9294109}.
Molecular Weight:	69.6 kDa
UniProt:	P54265
Pathways:	Regulation of Muscle Cell Differentiation, Synaptic Membrane, Skeletal Muscle Fiber Development
Application Details	
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.