

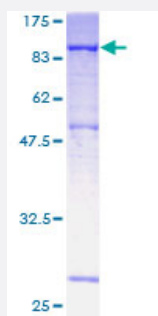
Full-Length

DMPK (Human) Recombinant Protein (P01)

Catalog # H00001760-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human DMPK full-length ORF (AAH62553, 1 a.a. - 629 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSAEVRLRRLQQLVLDPGFLGLEPLDLLLGVHQELGASELAQDKYVADFLQWAEPVRLKEVR
LQRDDFEILKVIGRGAFSEVAVVKMKQTGQVYAMKIMNKWDMLKRGEVSCFREERDVLVNGDRR
WITQLHFAFQDENLYLVMEYVGGDLLTLLSKFGERIPAEMARFYLAIVMAIDSVHRLGYVHRDIK
PDNILLDRCGHIRLADFGSCLKLADGTVRSLVAVGTPDYLSEILQAVGGPGTGSYGPECDWW
ALGVFAYEMFYGQTPFYADSTAETYGKMHYKEHLSLPLVDEGVPEEARDFIQRLLCPPETRLGRG
GAGDFRTHPFFFGLDWDGLRDSVPPFTPDFEGATDTCNFDLVEDGLTAMVSGGGETLSDIREG
APLGVHLPFVGYSYSCMALRDSEVPGPTPMELEAEQLLEPHVQAPSLEPSVSPQDETAEVAVP
AAVPAAEAEAEVTLRELQEALEEEVLTRQSLSREMEAIRTDNQNFASQLREAEARNRDLEAHVR
QLQERMELLQAEGATAVTGVPSPRATDPPSHLDGPPAVAVGQCPLVGPMPHRRHLLPARVP
RPLGSEALSLLLFAVVLSRAAALGCIGLVAHAGQLTAVWRRPGAARAP

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

94.93

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — DMPK

Entrez GeneID [1760](#)

GeneBank Accession# [BC062553](#)

Protein Accession# [AAH62553](#)

Gene Name DMPK

Gene Alias DM, DM1, DM1PK, DMK, MDPK, MT-PK

Gene Description dystrophin myotonia-protein kinase

Omim ID [160900 605377](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a serine-threonine kinase that is closely related to other kinases that interact with members of the Rho family of small GTPases. Substrates for this enzyme include myogenin, the beta-subunit of the L-type calcium channels, and phospholemman. The 3' untranslated region of this gene contains 5-37 copies of a CTG trinucleotide repeat. Expansion of this unstable motif to 50-5,000 copies causes myotonic dystrophy type I, which increases in severity with increasing repeat element copy number. Repeat expansion is associated with condensation of local chromatin structure that disrupts the expression of genes in this region. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided by RefSeq]

Other Designations

DM protein kinase|dystrophia myotonica 1|myotonic dystrophy associated protein kinase|myotonic dystrophy protein kinase|myotonin protein kinase A|thymopoietin homolog

Disease

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- [Atherosclerosis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Cataract](#)
- [Chromosome Disorders](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Fragile X syndrome](#)
- [Friedreich Ataxia](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Muscular Atrophy](#)
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