

Active Recombinant Human DMPK Protein, GST-tagged

Cat. No. DMPK-2707H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human DMPK (AAA75236.1, 1 a.a. - 544 a.a.) partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Species	Human
Source	Insect Cells
ProteinLength	1-544 a.a.
Description	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 5-38 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, Jul 2016]
Form	Liquid
Bio-activity	The activity was determined by ELISA. The enzyme was incubated with GST-fused substrate protein, and after stopping kinase reaction by EDTA, the reaction solution

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was transferred into glutathione-coated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit IgG.

Substrate: MYPT1.

ATP: 100 μ M.

Molecular Mass	88 kDa
Purity	82 % by SDS-PAGE/CBB staining
Applications	Functional Study SDS-PAGE
Storage	Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)

GENE INFORMATION

Gene Name	DMPK dystrophia myotonica-protein kinase [Homo sapiens]
Official Symbol	DMPK
Synonyms	DMPK; dystrophia myotonica-protein kinase; myotonin-protein kinase; DM; DM protein kinase; DM1; DM1PK; DMK; dystrophia myotonica 1; MDPK; MT PK; myotonic dystrophy associated protein kinase; myotonin protein kinase A; thymopoietin homolog; DM-kinase; DM1 protein kinase; myotonic dystrophy protein kinase; MT-PK;
Gene ID	1760
mRNA Refseq	NM_001081563

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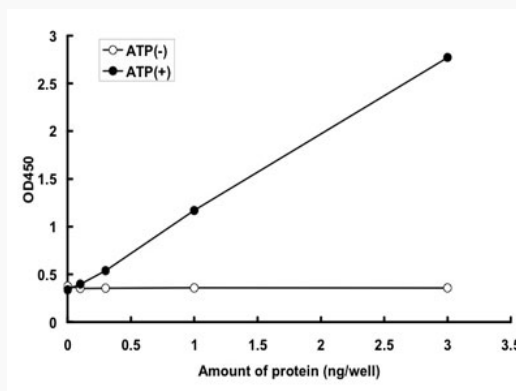
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Protein Refseq NP_001075032

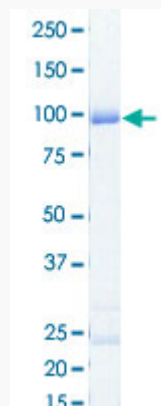
MIM 605377

UniProt ID Q09013

Result of activity analysis



Quality Control Testing



Loading 1 µg protein in SDS-PAGE

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