

Recombinant Human PHKA1 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. PHKA1-4121H Lot. No. (See product label)

SPECIFICATION

Product Overview	PHKA1 MS Standard C13 and N15-labeled recombinant protein (NP_002628) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	Phosphorylase kinase is a polymer of 16 subunits, four each of alpha, beta, gamma and delta. The alpha subunit includes the skeletal muscle and hepatic isoforms, and the skeletal muscle isoform is encoded by this gene. The beta subunit is the same in both the muscle and hepatic isoforms, and encoded by one gene. The gamma subunit also includes the skeletal muscle and hepatic isoforms, which are encoded by two different genes. The delta subunit is a calmodulin and can be encoded by three different genes. The gamma subunits contain the active site of the enzyme, whereas the alpha and beta subunits have regulatory functions controlled by phosphorylation. The delta subunit mediates the dependence of the enzyme on calcium concentration. Mutations in this gene cause glycogen storage disease type 9D, also known as X-linked muscle glycogenosis. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene. A pseudogene has been found on chromosome 1.
Molecular Mass	135.81 kDa

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AA Sequence

MRSRSNSGVRLDGYARLVQQTILCHQNPVTGLLPASVDQKDAWVRDNVYSILAVW
 GLGLAYRKNADRDEDKAKAYELEQSVVKLMRGLLHCMIRQVDKVESFKYSQSTKDS
 LHAKYNTKTCATVVGDDQWGHLLQDATSVYLLFLAQMTASGLHIIHSLDEVNFIQNLV
 FYIEAAYKTADFGIWERGDKTNQGISELNASSVGMKAALDELDLFGVKGGPQS
 VIHVLADEVQHCQSILNSLLPRASTSKEVDASLLSVVSFPAFAVEDSQLVELTKQEIT
 KLQGRYGCCRFLRDGYKTPKEDPNRLYYEPAELKLFENIECEWPLFWTYFILDGVFS
 GNAEQVQEYKEALEAVLIKGNKVPLPELYSVPPDRVDEEYQNPHTVDRVPMGKL
 PHMWGQSLYLGLSLMAEGFLAPGEIDPLNRRFSTVPKPDVVQVSILAETEEIKTILKD
 KGIYVETIAEVYPIRVQPARILSHIYSSLCNNRMKLSGRPYRHMVGLGTSKLYDIRKT
 IFTFTPQFIDQQQFYALDNKMIVEMLRDLSYLCRWRMTGQPTITFPIHSHMLDED
 GTSLNSSILAALRKMQDGYFGGARVQTGKLSEFLTSCCTHLSFMDPGPEGKLYSE
 DYDDNYDYLESNGNWMNDYDSTSHARCGDEVARYLDHLLAHTAPHPKLAPTSQKGG
 LDRFQAAVQTTCDLMSLVTKAKELHVQNVHMYLPTKLFQASRPSFNLLDSPHPRQE
 NQVPSVRVEIHLPRDQSGEVDKALVLQLKETSSLQEADILYMLYTMKGPDWNTL
 YNERSATVRELLTELYGKVGEIRHWGLIRYISGILRKKVEALDEACTDLLSHQKHLTV
 GLPPEPREKTISAPLPYEALTQLIDEASEGDMSSISILTQEIMVYLAMYMRTPQGLFAE
 MFRLRIGLIQVMATELAHSLRCSAEAEATEGLMNLSPSAMKNLLHHILSGKEFGVERS
 VRPTDSNVSPAISIHEIGAVGATKTERTGIMQLKSEIKQSPGTSMTSPSSGSFSPAYDQ
 QSSKDSRQGQWQRRRLD GALNRVPVGFYQKVWVQLQKCHGLSVEGFVLPSSST
 REMTPGEIKFSVHVESVLNRVPQPEYRQLLVEAILVLTMLADIEHSIGSIIAVEKIVHIA
 NDLFLQEQLTGLGADDTMLAKDPASGICTLLYDSAPSGRFGTMTYLSKAAATYVQEFL
 PHSICAMQTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Purity

> 80% as determined by SDS-PAGE and Coomassie blue staining

Stability

Stable for 3 months from receipt of products under proper storage and handling conditions.

Storage

Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

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Concentration 50 µg/mL as determined by BCA

Storage Buffer 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name PHKA1 phosphorylase kinase regulatory subunit alpha 1 [Homo sapiens (human)]

Official Symbol PHKA1

Synonyms PHKA1; phosphorylase kinase regulatory subunit alpha 1; PHKA; phosphorylase b kinase regulatory subunit alpha, skeletal muscle isoform; phosphorylase kinase alpha M subunit; phosphorylase kinase, alpha 1 (muscle), muscle glycogenosis; EC 2.7.11.19

Gene ID 5255

mRNA Refseq NM_002637

Protein Refseq NP_002628

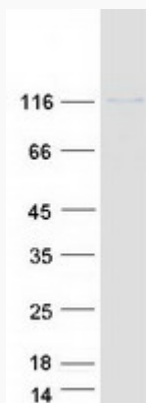
MIM 311870

UniProt ID P46020

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SDS-PAGE

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