

Product datasheet for **TP311553M**

PHKA1 (NM_002637) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human phosphorylase kinase, alpha 1 (muscle) (PHKA1), transcript variant 1, 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC211553 representing NM_002637 Red =Cloning site Green =Tags(s)

MRSRSNSGVRLDGYARLVQQTILCHQNPVTGLLPASVDQKDAWVRDNVYSILAVWGLGLAYRKNADRDE
 D
 KAKAYELEQSVVKLMRGLLHCMIRQVDKVESFKYSQSTKDSLHAKYNTKTCATVVGDDQWGHQLDQTS
 V
 YLLFLAQMTASGLHHIHLDEVNFIQNLVFIYAAYKTADFGIWERGDKTNQGISELNASSVGMAKAALE
 ALDELDLFGVKGGPQSVIHVLADDEVQHCQSILNSLLPRASTSKEVDASLLSVSFPAFAVEDSQLVELTK
 QEITKLQGRYGCCRFLRDGYKTPKEDPNRLYYEPAELKLFENIECEWPLFWTYFILDGVFSGNAEQVQE
 YKEALEAVLIKGNKVPLPELYSVPPDRVDEEYQNPHTVDRVPMGKLPHMWGQSLYLGLSLMAEGFLAP
 GEIDPLNRRFSTVPKPDVVQVSILAETEEIKTLKDKGIYVETIAEVYPIRVQPARILSHIYSSLGCNN
 RMKLSGRPYRHMVGLGTSKLYDIRKTIFTTPQFIDQQQFYALDNKMIVEMLRDLSYLCRWRMTGQP
 TITFPISHMLDEDGTSLNSSILAALRKMQDGYFGGARVQTGKLSEFLTTSCTHLSFMDPGPEGKLYSE
 DYDDNYDYLESIGNWMNDYDSTSHARCGDEVARYLDHLLAHTAPHPKLAPTSQKGGDLRFQAAVQTTC
 LM
 SLVTKAKELHVQNVHMYLPTKLFQASRPSFNLLDSPHPRQENQVPSVRVEIHLPRDQSGEVDFKALVLQL
 KETSSLQEADILYMLYTMKGPDWNTELYNERSATVRELLTELYGKVGGEIRHWGLIRYISGILRKKVEAL
 DEACTDLLSHQKHLTVGLPPEPREKTISAPLPYEALTQLIDEASEGDMISILTQEIMVYLAMYMRTPG
 LFAEMFRLRIGLIQVMATELAHSLRCSAEATEGLMNLSPSAMKNLLHHILSGKEFGVERSVRPTDSNV
 SPAISIHEIGAVGATKTERTGIMQLKSEIKSPGTSMTSSGFSFSAVDQSSKDSRQGGWQRRRLDGA
 LNRVPVGFYQKVWKVLQKCHGLSVEGFVLPSSTTREMTPEIKFSVHVESVLNRVPQPEYRQLLVEAILV
 LTMLADIEIHSIGSIIAVEKIVHIANDLFLQEQLTGADDTMLAKDPASGICTLLYDSAPSGRFGTMTYL
 SKAAATYVQEFLPHSICAMQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

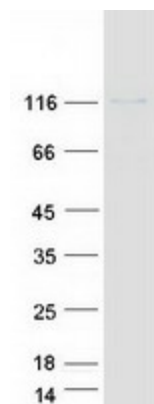
Tag: C-Myc/DDK



[View online »](#)

Predicted MW:	137.1 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_002628
Locus ID:	5255
UniProt ID:	P46020
RefSeq Size:	4215
Cytogenetics:	Xq13.1
RefSeq ORF:	3630
Synonyms:	PHKA
Summary:	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.[provided by RefSeq, Feb 2010]
Protein Families:	Druggable Genome
Protein Pathways:	Calcium signaling pathway, Insulin signaling pathway

Product images:



Coomassie blue staining of purified PHKA1 protein (Cat# [TP311553]). The protein was produced from HEK293T cells transfected with PHKA1 cDNA clone (Cat# [RC211553]) using MegaTran 2.0 (Cat# [TT210002]).