10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PHKA1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58257

Specification

PHKA1 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	P46020
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**137 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human PHKA1**
Epitope Specificity	**51-150/1233**
Isotype	**IgG**
Purity affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cell membrane; Lipid-anchor; Cytoplasmic side (Potential).**
SIMILARITY	**Belongs to the phosphorylase b kinase regulatory chain family.**
SUBUNIT	**Hexadecamer of 4 heterotetramers, each composed of alpha, beta, gamma, and delta subunits. Alpha (PHKA1 or PHKA2) and beta (PHKB) are regulatory subunits, gamma (PHKG1 or PHKG2) is the catalytic subunit, and delta is calmodulin.**
Post-translational modifications	**Although the final Cys may be farnesylated, the terminal tripeptide is probably not removed, and the C-terminus is not methylated (By similarity).**
DISEASE	**Glycogen storage disease 9D (GSD9D) [MIM:300559]: A metabolic disorder characterized by slowly progressive, predominantly distal muscle weakness and atrophy. Clinical features include exercise intolerance with early fatigability, pain, cramps and occasionally myoglobinuria. Note=The disease is caused by mutations affecting the gene represented in this entry.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
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.

PHKA1 Polyclonal Antibody - Additional Information

Gene ID 5255

Other Names
Phosphorylase b kinase regulatory subunit alpha, skeletal muscle isoform, Phosphorylase kinase alpha M subunit, PHKA1, PHKA

Target/Specificity
Muscle specific. Isoform 1 is predominant in vastus lateralis muscle. Isoform 2 predominates slightly in heart, and it predominates clearly in the other tissues tested.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

PHKA1 Polyclonal Antibody - Protein Information

Name PHKA1

Synonyms PHKA

Function
Phosphorylase b kinase catalyzes the phosphorylation of serine in certain substrates, including troponin I. The alpha chain may bind calmodulin.

Cellular Location
Cell membrane; Lipid-anchor; Cytoplasmic side

Tissue Location
Muscle specific. Isoform 1 is predominant in vastus lateralis muscle. Isoform 2 predominates slightly in heart, and it predominates clearly in the other tissues tested

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PHKA1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PHKA1 Polyclonal Antibody - Images