

**Product Name: PHKB Rabbit Polyclonal Antibody****Catalog #: APRab16073**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC
<b>Reactivity</b>	Human,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:50-1:300
<b>Molecular Weight</b>	124kDa

**Antigen Information**

<b>Gene Name</b>	PHKB
<b>Alternative Names</b>	PHKB; Phosphorylase b kinase regulatory subunit beta; Phosphorylase kinase subunit beta
<b>Gene ID</b>	5257.0
<b>SwissProt ID</b>	Q93100
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human KPBB. AA range:661-710

**Background**

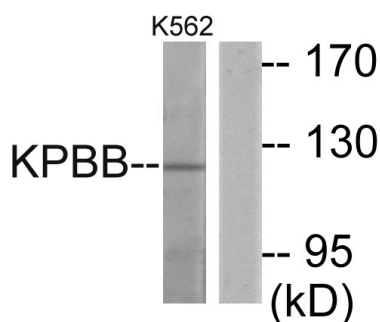
Phosphorylase kinase is a polymer of 16 subunits, four each of alpha, beta, gamma and delta. The alpha subunit includes the

skeletal muscle and hepatic isoforms, encoded by two different genes. The beta subunit is the same in both the muscle and hepatic isoforms, encoded by this gene, which is a member of the phosphorylase b kinase regulatory subunit family. The gamma subunit also includes the skeletal muscle and hepatic isoforms, 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 9B, also known as phosphorylase kinase deficiency. Defects in PHKB are the cause of glycogen storage disease type 9B (GSD9B) [MIM:261750]; also known as phosphorylase kinase deficiency of liver and muscle (PKD). GSD9B is a metabolic disorder characterized by hepatomegaly, only slightly elevated transaminases and plasma lipids, clinical improvement with increasing age, and remarkably no clinical muscle involvement. Biochemical observations suggest that this mild phenotype is caused by an incomplete holoenzyme that lacks the beta subunit, but that may possess residual activity. Enzyme regulation: By phosphorylation of various serine residues. Function: Phosphorylase b kinase catalyzes the phosphorylation of serine in certain substrates, including troponin I. The beta chain acts as a regulatory unit and modulates the activity of the holoenzyme in response to phosphorylation. Pathway: Glycan biosynthesis; glycogen metabolism. Similarity: Belongs to the phosphorylase b kinase regulatory chain family. Subunit: Polymer of 16 chains, four each of alpha, beta, gamma, and delta. Alpha and beta are regulatory chains, gamma is the catalytic chain, and delta is calmodulin.

## Research Area

Calcium; Insulin\_Receptor;

## Image Data



Western blot analysis of lysates from K562 cells, using KPBB Antibody. The lane on the right is blocked with the synthesized peptide.