For Research Use Only

PHKG2 Recombinant monoclonal antibody

Catalog Number:83663-2-RR



Basic Information

Catalog Number: 83663-2-RR Source:

Isotype:

Rabbit

Immunogen Catalog Number:

AG6829

phosphorylase kinase, gamma 2 (testis)

> Calculated MW: 46 kDa Observed MW: 46 kDa

GenBank Accession Number:

BC002541

5261

P15735

GeneID (NCBI):

UNIPROT ID:

Full Name:

Purification Method:

Protein A purification

CloneNo.: 240643E1

Recommended Dilutions: WB: 1:2000-1:10000 IHC: 1:200-1:800 IF/ICC: 1:50-1:500

FC (Intra): 0.25 ug per 10^6 cells in a

100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HepG2 cells, MCF-7 cells, mouse liver tissue

IHC: mouse liver tissue, IF/ICC: HEK-293 cells,

FC (Intra): HEK-293T cells, HepG2 cells

Background Information

PHKG2 (phosphorylase kinase catalytic subunit gamma 2), it is expected to be located in the cytoplasm, which is enriched in the testis. Catalytic subunit of the phosphorylase b kinase (PHK), which mediates the neural and hormonal regulation of glycogen breakdown (glycogenolysis) by phosphorylating and thereby activating glycogen phosphorylase. It may regulates glycogeneolysis in the testis. Phosphorylase kinase is a polymer of 16 subunits, four each of alpha, beta, gamma and delta. The gamma subunit also includes the skeletal muscle and hepatic isoforms, and the hepatic isoform is encoded by this gene. 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. The molecular weight of PHKG2 is 46

Storage

Storage:

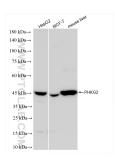
Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

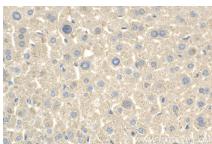
Selected Validation Data



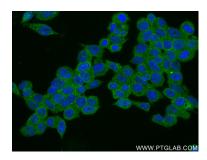
Various lysates were subjected to SDS PAGE followed by western blot with 83663-2-RR (PHKG2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



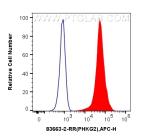
Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 83663-2-RR (PHKG2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



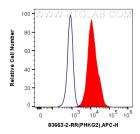
Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 83663-2-RR (PHKG2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



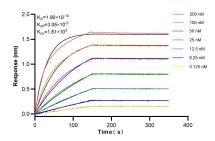
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using PHKG2 antibody (83663-2-RR, Clone: 240643E1) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10^6 HEK-293T cells were intracellularly stained with 0.25 ug PHKG2 Recombinant antibody (83663-2-RR, Clone:240643E1) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Ruffer



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug PHKG2 Recombinant antibody (83663-2-RR, Clone:240643E1) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Ruffer



Biolayer interferometry (BLI) kinetic assays of 83663-2-RR against Human PHKG2 were performed. The affinity constant is 1.90 nM.