

Product datasheet for TA800343M

OriGene Technologies, Inc.

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PHKG2 Mouse Monoclonal Antibody [Clone ID: OTI2E5]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI2E5
Applications: IHC, WB
Recommended Dilution: WB 1:500

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment corresponding to amino acids 1-216 of human PHKG2

(NP_000285) produced in E.coli.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 46.3 kDa

Gene Name: phosphorylase kinase catalytic subunit gamma 2

Database Link: NP 000285

Entrez Gene 68961 MouseEntrez Gene 5261 Human

P15735





Background:

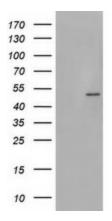
Phosphorylase kinase is a polymer of 16 subunits, four each of alpha, beta, gamma and delta. The alpha subunit includes the skeletal muscle and hepatic isoforms, encoded by two different genes. The beta subunit is the same in both the muscle and hepatic isoforms, and encoded by one gene. The gamma subunit also includes the skeletal muscle and hepatic isoforms, and the hepatic isoform is encoded by this gene. 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 9C, also known as autosomal liver glycogenosis. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene.

Synonyms: GSD9C

Protein Families: Druggable Genome, Protein Kinase

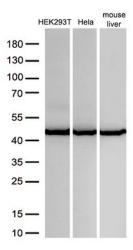
Protein Pathways: Calcium signaling pathway, Insulin signaling pathway

Product images:

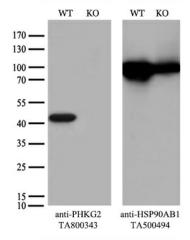


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PHKG2 ([RC200597], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PHKG2. Positive lysates [LY400111] (100ug) and [LC400111] (20ug) can be purchased separately from OriGene.

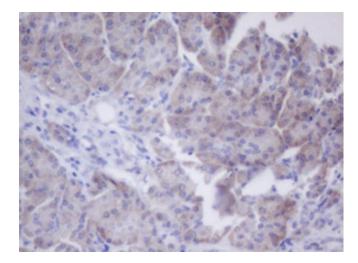




Western blot analysis of extracts (50ug per lane) from 2 different cell lines and 1 tissue lysates by using anti-PHKG2 antibody ([TA800343],1:2000; 1mg/ml).

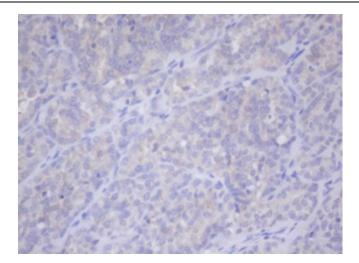


Equivalent amounts of cell lysates (10 ug per lane) of wild-type HEK293T cells (WT, Cat# LC810293T) and PHKG2-Knockout HEK293T cells (KO, Cat# [LC840780]) were separated by SDS-PAGE and immunoblotted with anti-PHKG2 monoclonal antibody [TA800343] (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.

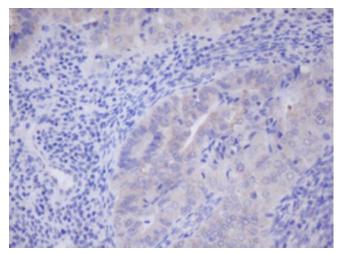


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PHKG2 mouse monoclonal antibody. ([TA800343]) Dilution: 1:150. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-PHKG2 mouse monoclonal antibody. ([TA800343]) Dilution: 1:150. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-PHKG2 mouse monoclonal antibody. ([TA800343]) Dilution: 1:150. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.