

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA800354

PHKG2 Mouse Monoclonal Antibody [Clone ID: OTI2A3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI2A3

Applications: FC, IF, WB

Recommend Dilution: WB 1:2000, IF 1:100, FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG2b

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)

Predicted Protein Size: 46.3 kDa

Gene Name: phosphorylase kinase catalytic subunit gamma 2

Database Link: NP 000285 Entrez Gene 5261 Human

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.



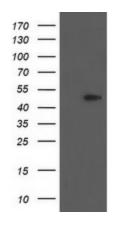


Synonyms: GSD9C

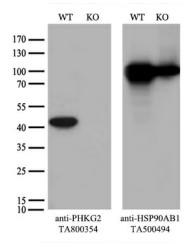
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Calcium signaling pathway, Insulin signaling pathway

Product images:

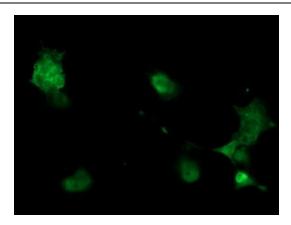


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PHKG2 ([RC200597], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PHKG2. Positive lysates [LY400111] (100ug) and [LC400111]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

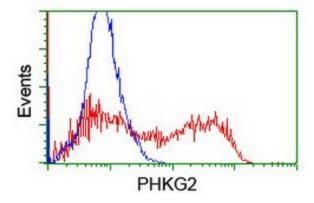


Equivalent amounts of cell lysates (10 ug per lane) of wild-type HEK293T cells (WT, Cat# LC810293T) and PHKG2-Knockout HEK293T cells (KO, Cat# [LC840780]) were separated by SDS-PAGE and immunoblotted with anti-PHKG2 monoclonal antibody TA800354 (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.





Anti-PHKG2 mouse monoclonal antibody (TA800354) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PHKG2 ([RC200597]).



HEK293T cells transfected with either [RC200597] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PHKG2 antibody (TA800354), and then analyzed by flow cytometry.