

Product datasheet for **CF800354**

PHKG2 Mouse Monoclonal Antibody [Clone ID: OTI2A3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2A3
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse
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:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
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 Mouse Entrez Gene 5261 Human P15735



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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:

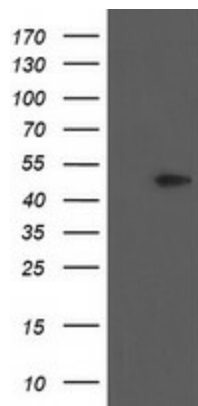
GSD9C

Protein Families:

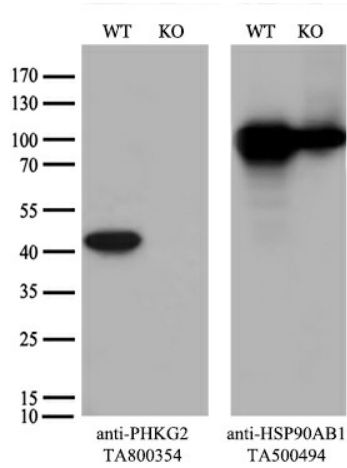
Druggable Genome, Protein Kinase

Protein Pathways:

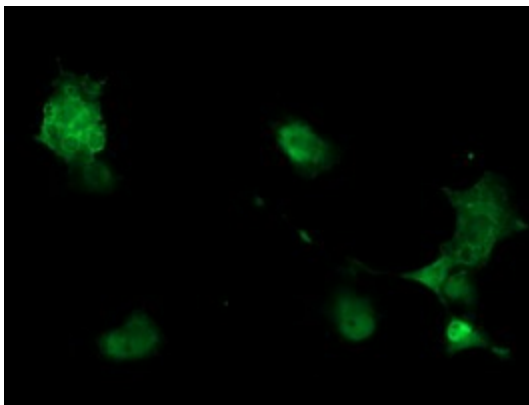
Calcium signaling pathway, Insulin signaling pathway

Product images:

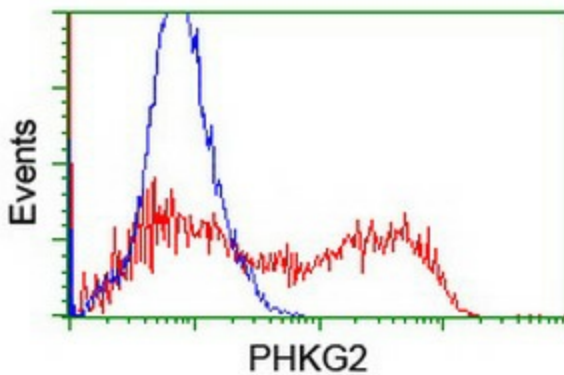
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PHKG2 ([RC200597], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PHKG2. Positive lysates [LY400111] (100ug) and [LC400111]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