10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

G6PC Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5224c

Specification

G6PC Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P35575
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**123-149**

G6PC Antibody (Center) - Additional Information

Gene ID 2538

Other Names
Glucose-6-phosphatase, G-6-Pase, G6Pase, Glucose-6-phosphatase alpha, G6Pase-alpha, G6PC, G6PT

Target/Specificity
This G6PC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 123-149 amino acids from the Central region of human G6PC.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
G6PC Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

G6PC Antibody (Center) - Protein Information

Name G6PC1 (HGNC:4056)

Synonyms G6PC, G6PT

Function Hydrolyzes glucose-6-phosphate to glucose in the endoplasmic reticulum. Forms with the glucose-6-phosphate transporter (SLC37A4/G6PT) the complex responsible for glucose production in the terminal step of glycogenolysis and gluconeogenesis. Hence, it is the key enzyme in homeostatic regulation of blood glucose levels.

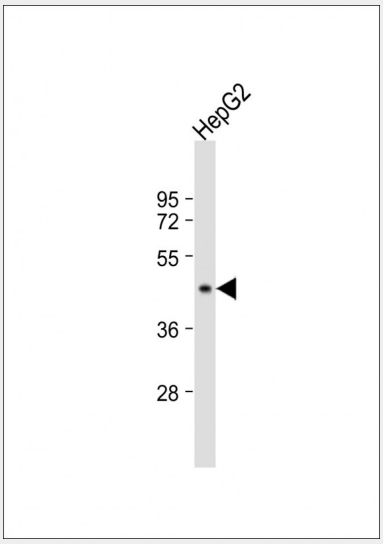
Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

G6PC Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

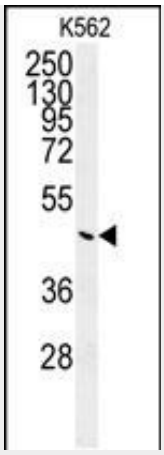
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

G6PC Antibody (Center) - Images

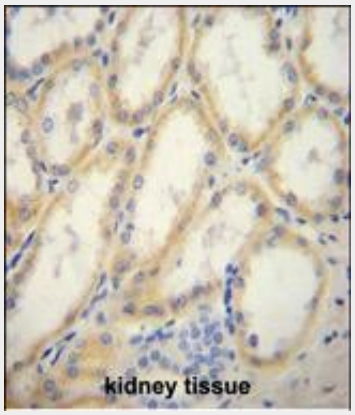


Anti-G6PC Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

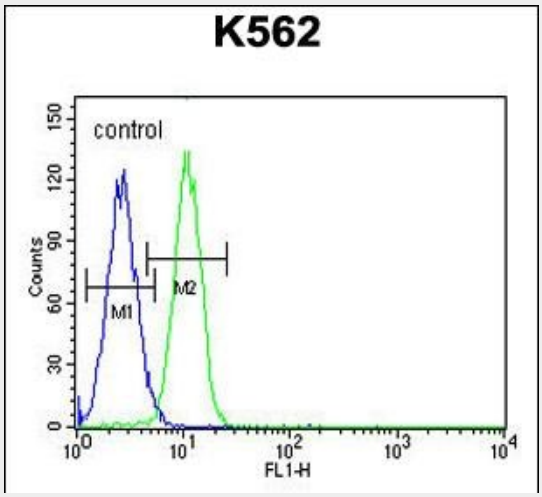
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Western blot analysis of G6PC Antibody (Center) (Cat. #AP5224c) in K562 cell line lysates (35ug/lane).G6PC (arrow) was detected using the purified Pab.



G6PC Antibody (Center) (Cat. #AP5224c) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the G6PC Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



G6PC Antibody (Center) (Cat. #AP5224c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

G6PC Antibody (Center) - Background

Glucose-6-phosphatase is an integral membrane protein of the endoplasmic reticulum that catalyzes the hydrolysis of D-glucose 6-phosphate to D-glucose and orthophosphate. It is a key enzyme in glucose homeostasis, functioning in gluconeogenesis and glycogenolysis. Defects in the enzyme cause glycogen storage disease type I.

G6PC Antibody (Center) - References

Tu, E., et al. Hum. Pathol. 41(3):392-400(2010)
Samuel, V.T., et al. Proc. Natl. Acad. Sci. U.S.A. 106(29):12121-12126(2009)
Hu, C., et al. Diabetologia 52(3):451-456(2009)

G6PC Antibody (Center) - Citations

- LONP1 ameliorates liver injury and improves gluconeogenesis dysfunction in acute-on-chronic liver failure
- Propionate suppresses hepatic gluconeogenesis via GPR43/AMPK signaling pathway.
- Effects of polysaccharide from the fruiting bodies of Auricularia auricular on glucose metabolism in Co-γ-radiated mice.