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G6PD Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5094c

Specification

G6PD Antibody (Center) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	P11413
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**59257**
Antigen Region	**297-326**

G6PD Antibody (Center) - Additional Information

Gene ID 2539

Other Names
Glucose-6-phosphate 1-dehydrogenase, G6PD, G6PD

Target/Specificity
This G6PD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 297-326 amino acids from the Central region of human G6PD.

Dilution
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
G6PD Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

G6PD Antibody (Center) - Protein Information

Name G6PD

Function Catalyzes the rate-limiting step of the oxidative pentose- phosphate pathway, which represents a route for the dissimilation of carbohydrates besides glycolysis. The main function of this enzyme is to provide reducing power (NADPH) and pentose phosphates for fatty acid and nucleic acid synthesis.

Cellular Location
Cytoplasm, cytosol. Membrane; Peripheral membrane protein

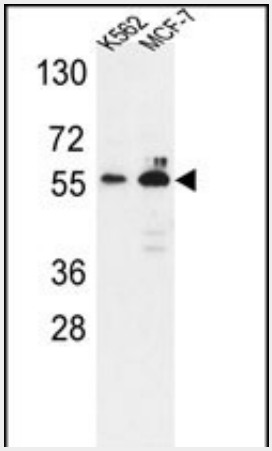
Tissue Location
Isoform Long is found in lymphoblasts, granulocytes and sperm

G6PD 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

G6PD Antibody (Center) - Images



Western blot analysis of G6PD Antibody (Center) (Cat. #AP5094c) in K562,MCF-7 cell line lysates (35ug/lane).G6PD (arrow) was detected using the purified Pab.

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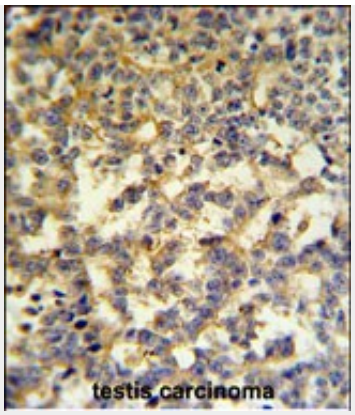
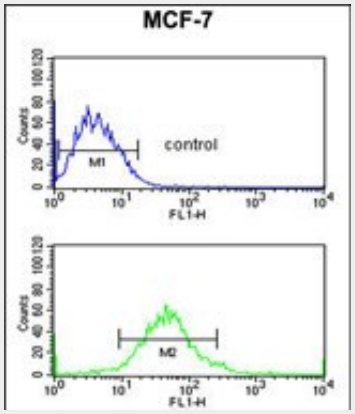


G6PD Antibody (Center) (Cat. #AP5094c) IHC analysis in formalin fixed and paraffin embedded testis followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the G6PD Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



G6PD Antibody (Center) (Cat. #AP5094c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

G6PD Antibody (Center) - Background

G6PD encodes glucose-6-phosphate dehydrogenase. This protein is a cytosolic enzyme encoded by a housekeeping X-linked gene whose main function is to produce NADPH, a key electron donor in the defense against oxidizing agents and in reductive biosynthetic reactions. G6PD is remarkable for its genetic diversity. Many variants of G6PD, mostly produced from missense mutations, have been described with wide ranging levels of enzyme activity and associated clinical symptoms. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia.

G6PD Antibody (Center) - References

Louicharoen, C., et al. Science 326(5959):1546-1549(2009)
Zhong, D.N., et al. Zhongguo Dang Dai Er Ke Za Zhi 11(12):970-972(2009)
Tiono, A.B., et al. Am. J. Trop. Med. Hyg. 81(6):969-978(2009)

G6PD Antibody (Center) - Citations

- Activation of pro-survival metabolic networks by 1,25(OH) does not hamper the sensitivity of breast cancer cells to chemotherapeutics.