

#### **PGD Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5448c

#### Specification

## PGD Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, IHC-P, WB,E P52209 P85968, P14332, O9DCD0, NP\_002622.2, P00349 Human, Mouse Pig, Rat, Sheep Rabbit Polyclonal Rabbit IgG 53140 236-265

### **PGD Antibody (Center) - Additional Information**

Gene ID 5226

Other Names 6-phosphogluconate dehydrogenase, decarboxylating, PGD, PGDH

#### Target/Specificity

This PGD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-265 amino acids from the Central region of human PGD.

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 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

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

## **PGD Antibody (Center) - Protein Information**



Name PGD

Synonyms PGDH

**Function** Catalyzes the oxidative decarboxylation of 6-phosphogluconate to ribulose 5-phosphate and CO(2), with concomitant reduction of NADP to NADPH.

Cellular Location Cytoplasm.

### **PGD Antibody (Center) - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# PGD Antibody (Center) - Images



PGD Antibody (Center) (Cat.#AP5448c) western blot analysis in 293,MCF-7 cell line lysates (35ug/lane).This demonstrates the PGD antibody detected PGD protein (arrow).





PGD Antibody (Center) (Cat.#AP5448c) western blot analysis in mouse spleen tissue lysates (35ug/lane).This demonstrates the PGD antibody detected PGD protein (arrow).



PGD Antibody (Center) (Cat. #AP5448c) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PGD Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



PGD Antibody (Center) (Cat. #AP5448c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# PGD Antibody (Center) - Background



6-phosphogluconate dehydrogenase is the second dehydrogenase in the pentose phosphate shunt. Deficiency of this enzyme is generally asymptomatic, and the inheritance of this disorder is autosomal dominant. Hemolysis results from combined deficiency of 6-phosphogluconate dehydrogenase and 6-phosphogluconolactonase suggesting a synergism of the two enzymopathies.

## PGD Antibody (Center) - References

Lehner, B., et al. Genome Res. 14(7):1315-1323(2004) Kerimov, B.F. Vopr. Med. Khim. 48(5):490-496(2002) Rippa, M., et al. Biochim. Biophys. Acta 1429(1):83-92(1998) **PGD Antibody (Center) - Citations** 

• <u>TAp73-induced phosphofructokinase-1 transcription promotes the Warburg effect and enhances cell proliferation.</u>