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PGD Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5448c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P52209
Other Accession	P85968, P14332, Q9DCD0, NP_002622.2
Reactivity	Human, Mouse
Predicted	Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22902
Calculated MW	53140
Antigen Region	236-265

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	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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.

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.

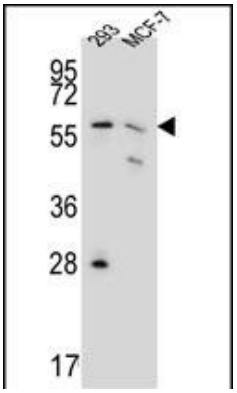
Background

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.

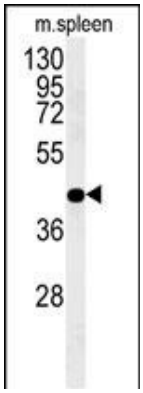
References

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)

Images

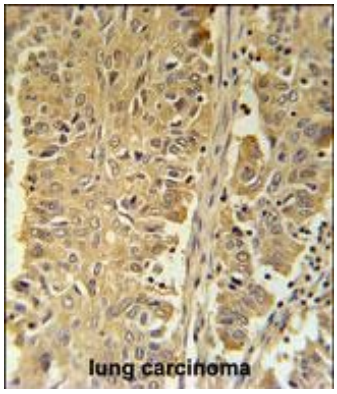


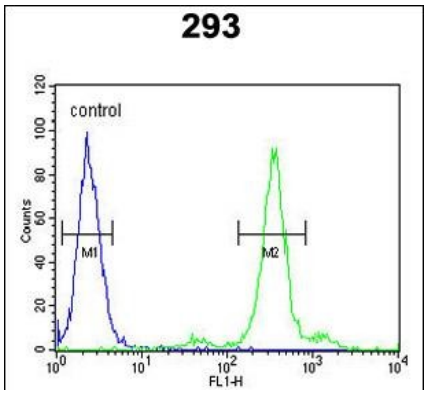
PGD Antibody (Center) (Cat.#AP5448c) western blot analysis in 293,MCF-7 cell line lysates (35ug/lane).This demonstrates the PGD antibody detected PGD protein (arrow).



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.

Citations

- TAp73-induced phosphofructokinase-1 transcription promotes the Warburg effect and enhances cell proliferation.