

Store at
-20C
#13389**PGD Antibody**

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 49	Source/Isotype: Rabbit	UniProt ID: #P52209	Entrez-Gene Id: 5226
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Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

PGD Antibody recognizes endogenous levels of total PGD protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala300 of human PGD protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

6-phosphogluconate dehydrogenase (PGD or 6PGD) catalyzes the conversion of 6-phosphogluconate and NADP⁺ to ribulose 5-phosphate and NADPH in the pentose phosphate pathway (1). Research studies show that knockdown of PGD results in the induction of senescence and inhibition of growth of lung cancer cells (2). Additional research suggests that PGD influences the migration of some cancer cells by regulating c-Met phosphorylation state (3). Furthermore, it was shown that the glycolytic enzyme PGAM1 substrate (3-phosphoglycerate) regulates the pentose phosphate pathway by deactivating PGD/6PGD (4).

Background References

- Jonas, S.K. et al. (1992) *Br J Cancer* 66, 185-91.
- Sukhatme, V.P. and Chan, B. (2012) *FEBS Lett* 586, 2389-95.
- Chan, B. et al. (2013) *Biochem Biophys Res Commun* 439, 247-51.
- Hitosugi, T. et al. (2012) *Cancer Cell* 22, 585-600.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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