

PRODUCT INFORMATION



Prostaglandin I Synthase Polyclonal Antibody

Item No. 160640

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified IgG.
Synonyms:	PGIS, PGI Synthase, Prostacyclin Synthase
Immunogen:	Peptide from an internal region of bovine PGIS
Species Reactivity:	(+) Bovine, ovine and human PGIS; (-) Rat PGIS
Uniprot No.:	Q29626
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Applications:	Western blot; the recommended starting dilution 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Description

Prostaglandin I synthase (PGIS) catalyzes the isomerization of PGH_2 to PGI_2 . PGI_2 (prostacyclin) is a potent vasodilator and inhibitor of platelet aggregation. PGIS is a membrane-bound hemoprotein localized primarily in endothelial cells.¹ The cloned bovine and human enzymes contain 500 amino acids and a calculated molecular mass of 56,629 and 57,103, respectively.¹⁻³ Northern blot analysis reveals that the mRNA for PGIS is expressed in a wide variety of human tissues and is particularly abundant in ovary, heart, skeletal muscle, lung, and prostate.²

References

1. DeWitt, D.L. and Smith, W.L. Purification of prostacyclin synthase from bovine aorta by immunoaffinity chromatography. Evidence that the enzyme is a hemoprotein. *J. Biol. Chem.* **258(5)**, 3285-3293 (1983).
2. Miyata, A., Hara, S., Yokoyama, C., *et al.* Molecular cloning and expression of human prostacyclin synthase. *Biochem. Biophys. Res. Commun.* **200(3)**, 1728-1734 (1994).
3. Pereira, B., Wu, K.K. and Wang, L.H. Molecular cloning and characterization of bovine prostacyclin synthase. *Biochem. Biophys. Res. Commun.* **203(1)**, 59-66 (1994).
4. Hara, S., Miyata, A., Yokoyama, C., *et al.* Isolation and molecular cloning of prostacyclin synthase from bovine endothelial cells. *J. Biol. Chem.* **269(31)**, 19897-19903 (1994).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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