

Product Information



Prostaglandin I Synthase Polyclonal Antibody

Item No. 160640 • Lot No. XXXXX

Synonyms:	PGI Synthase; Prostacyclin Synthase
Contents:	This vial contains (100-500 µg of peptide affinity-purified IgG, <i>lot specific</i>) in 500 µl of TBS, pH 8.0, containing 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide.
Host:	Rabbit
Antigen:	Synthetic peptide from bovine PGIS sequence (amino acids 299-329; LLKNPEALAAVRGELETVLLGAEQPISQMTT) conjugated to KLH. ¹⁻³
Cross-reactivity:	(+) Bovine, ovine and human PGIS; (-) rat PGIS. Homology of peptide antigen with PGIS from other species: Bovine LLKNPEALAAVRGELETVLLGAEQPISQMTT Human LLKNPEALAAVRGELE s i Lwq AEQPvSQ t T T Ovine LLKNPEALdAV h a ELk T i vwq AE k Pvl QMT a
Stability:	≥1 year at -20°C
Applications:	Western blot and immunoprecipitation; other applications not tested. For detection of PGIS by Western blot, a dilution of 1: <i>lot specific</i> works well. For other applications the working concentration must be determined empirically.
Concentration:	Varies by lot, from 0.2-1.0 mg/ml (100-500 µg/vial). Always 100 ml final working volume for western blotting.

Prostaglandin I synthase (PGIS) catalyzes the isomerization of PGH₂ to PGI₂. PGI₂ (prostacyclin) is a potent vasodilator and inhibitor of platelet aggregation. PGIS is a membrane-bound hemoprotein localized primarily in endothelial cells.⁴ 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.¹

References

1. Miyata, A., Hara, S., Yokoyama, C., *et al.* Molecular cloning and expression of human prostacyclin synthase. *Biochem. Biophys. Res. Commun.* **200**, 1728-1734 (1994).
2. Pereira, B., Wu, K.K. and Wang, L.H. Molecular cloning and characterization of bovine prostacyclin synthase. *Biochem. Biophys. Res. Commun.* **203**, 59-66 (1994).
3. Hara, S., Miyata, A., Yokoyama, C., *et al.* Isolation and molecular cloning of prostacyclin synthase from bovine endothelial cells. *J. Biol. Chem.* **269**, 19897-19903 (1994).
4. 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**, 3285-3293 (1983).

Related Products

Prostaglandin I Synthase Monoclonal Antibody - Item No. 160630 • Prostaglandin I Synthase Blocking Peptide - Item No. 360640

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any **obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 10/06/2011

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com