

PRODUCT INFORMATION

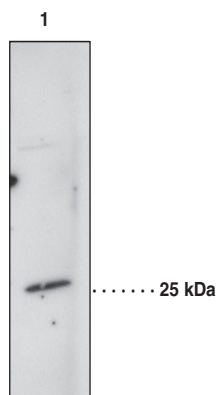


Prostaglandin D Synthase (hematopoietic) Polyclonal Antibody Item No. 160013

Overview and Properties

Contents:	This vial contains 500 µl peptide affinity-purified antibody.
Synonyms:	H-PGD Synthase, H-PGDS
Immunogen:	Synthetic peptide from the N-terminal region of human H-PGDS
Species Reactivity:	(+) Human, mouse, and rat; other species not tested
Uniprot No.:	O60760
Form:	Solid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Application:	Western blot; the recommended starting dilution 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Baboon myometrium (50 µg)

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
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Prostaglandin D synthase (PGDS) catalyzes the isomerization of PGH_2 to produce PGD_2 . PGD_2 induces sleep, regulates nociception, inhibits platelet aggregation, and acts as an allergic mediator. Two distinct types of PGDS have been identified, namely the lipocalin type enzyme (β -trace) and the hematopoietic enzyme.²⁻⁴ Lipocalin type PGDS is localized in the central nervous system and male genital organs of various mammals and the human heart. This enzyme has been identified as β -trace, which is a major protein in human cerebrospinal fluid.^{3,5} Hematopoietic PGDS is widely distributed in the peripheral tissues and is localized in the antigen-presenting cells, mast cells, and megakaryocytes.² This enzyme, which requires glutathione for activity, belongs to the sigma-class of glutathione-S-transferases and is approximately 23 kDa in size.¹

References

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2. Urade, Y., Watanabe, K., and Hayaishi, O. Prostaglandin D, E, and F synthases. *J. Lipid Mediators Cell Signalling* **12(2-3)**, 257-273 (1995).
3. Toh, H., Kubodera, H., Nakajima, N., *et al.* Glutathione-independent prostaglandin D synthase as a lead molecule for designing new functional proteins. *Protein Eng* **9(12)**, 1067-1082 (1996).
4. Kanaoka, Y., Ago, H., Inagaki, E., *et al.* Cloning and crystal structure of hematopoietic prostaglandin D synthase. *Cell* **90(6)**, 1085-1095 (1997).
5. Zahn, M., Mäder, A., Schmidt, B., *et al.* Purification and N-terminal sequence of β -trace, a protein abundant in human cerebrospinal fluid. *Neurosci. Lett.* **154(1-2)**, 93-95 (1993).

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