

PRODUCT INFORMATION



Prostaglandin E Synthase-1 (microsomal) Monoclonal Antibody (Clone 6C6) Item No. 10004350

Overview and Properties

Contents:	This vial contains 300 µg of protein G-affinity purified monoclonal antibody.
Synonyms:	Membrane-Associated PGES-1, MGST1-L1, mPGE Synthase-1, mPGES-1, PIG12, Prostaglandin H/E Isomerase
Immunogen:	Recombinant human mPGES-1
Species Reactivity:	(+) Human, (-) ovine; other species not tested
Uniprot No.:	O14684
Form:	Solid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, after resuspension in 300 µl purified water
Clone:	6C6
Host:	Mouse
Isotype:	IgG1
Applications:	Western blot (WB); the recommended starting dilution is 3 µg/ml. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Human lung cancer cell lysate (50 µg)
Lane 2: TNF α treated human lung cancer cell lysate (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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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

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Description

Prostaglandin E synthase-1 (PGES-1) catalyzes the isomerization of PGH₂ to PGE₂. PGE₂ is one of the primary COX products of arachidonic acid and one of the most widely investigated PGs. Its activity influences inflammation, fertility and parturition, gastric mucosal integrity, and immune modulation.¹⁻⁴ PGES-1 is a 16 kDa membrane associated protein with glutathione-dependent activity.^{5,6} The mRNA for PGES-1 is expressed in a variety of tissues including prostate, testes, and small intestine as well as in A549 and HeLa cells. PGES-1 protein expression is increased in A549 cells following treatment with IL-1β.⁵ Cayman's PGE Synthase-1 (microsomal) Monoclonal Antibody (Clone 6C6) can be used for Western blot applications. The antibody recognizes PGE Synthase-1 (microsomal) at 16 kDa from human and ovine samples.

References

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5. Jakobsson, P.-J., Thorén, S., Morgenstern, R., et al. Identification of human prostaglandin E synthase: A microsomal, glutathione-dependent, inducible enzyme, constituting a potential novel drug target. *Proc. Natl. Acad. Sci. USA* **96(13)**, 7220-7225 (1999).
6. Urade, Y., Watanabe, K., and Hayaishi, O. Prostaglandin D, E, and F synthases. *J. Lipid Mediat. Cell Signal.* **12(2-3)**, 257-273 (1995).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
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