

PRODUCT INFORMATION



COX Polyclonal Antibody

Catalog No. 160103

Overview and Properties

Contents:	This vial contains Cibracron Blue purified antibody lyophilized from 500 μ l.
Synonyms:	Prostaglandin H Synthase; Cyclooxygenase
Immunogen:	Purified sheep seminal vesicular COX-1
Species Reactivity:	(+) Murine COX-1, sheep seminal vesicular COX-1, sheep placental COX-2; other species not tested
Uniprot No.:	P05979
Form:	Solid
Storage:	-20°C (as supplied)
Stability:	\geq 3 years
Storage Buffer:	TBS, pH 7.4, with 0.5 mg/ml BSA, when reconstituted with 500 μ l ddH ₂ O
Host:	Rabbit
Applications:	Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Ovine COX-1

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

Cyclooxygenase catalyzes the first step in the biosynthesis of prostaglandins, thromboxanes, and prostacyclins: the conversion of arachidonic acid to prostaglandin H₂. COX-1 is constitutively expressed in almost all animal tissues and is involved in the homeostatic role of eicosanoids.^{1,2} Recent discoveries of the induction of cyclooxygenase biosynthesis by a variety of stimuli such as phorbol esters, lipopolysaccharides, and cytokines led to the hypothesis that the inducible form of cyclooxygenase, COX-2, is responsible for the biosynthesis of prostaglandins under acute inflammatory conditions.³ COX-1 and -2 are 70 and 72 kDa proteins, respectively. Both cyclooxygenases have been cloned from a variety of species including human, mouse, rat, and sheep.^{4,5} COX-1 or -2 from these species are approximately 90% identical to their respective COX isoform at the amino acid level, whereas the homology between COX-1 and COX-2 is only about 60%.

References

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3. Xie, W., Chipman, J.G., Robertson, D.L., *et al.* Expression of a mitogen-responsive gene encoding prostaglandin synthase is regulated by mRNA splicing. *Proc. Natl. Acad. Sci. USA* **88(7)**, 2692-2696 (1991).
4. Funk, C.D., Funk, L.B., Kennedy, M.E., *et al.* Human platelet/erythroleukemia cell prostaglandin G/H synthase: cDNA cloning, expression, and gene chromosomal assignment. *FASEB J.* **5(9)**, 2304-2312 (1991).
5. Zhang, V., O'Sullivan, M., Hussain, H., *et al.* Molecular cloning, functional expression, and selective regulation of ovine prostaglandin H synthase-2. *Biochem. Biophys. Res. Commun.* **227(2)**, 499-506 (1996).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
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FAX: [734] 971-3640
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