

# Product Information



## COX-2 (murine) Polyclonal Antibody

Catalog No. 160106 • Lot No. XXXXX

<b>Synonyms:</b>	Cyclooxygenase 2 Polyclonal Antibody; Prostaglandin H Synthase 2 Polyclonal Antibody
<b>Contents:</b>	This vial contains XXX µg of peptide affinity-purified IgG in XXX µl of TBS, pH 7.4, containing 50% glycerol 0.5 mg/ml BSA, and 0.02% sodium azide.
<b>Host:</b>	Rabbit
<b>Antigen:</b>	Synthetic peptide from the C-terminal region of murine/rat COX-2, conjugated to BSA (amino acids 570-598; DPQPTKTATINASASHSRLDDINPTVLIK). <sup>1</sup>
<b>Cross-reactivity:</b>	(+) Ovine, human, murine, rabbit, monkey, guinea pig, and rat COX-2; (-) COX-1 (all species) Homology of peptide antigen with COX-2 from other species: Mouse DPQPTKTATINASASHSRLDDINPTVLIK Rat DPQPTKTATINASASHSRLDDINPTVLIK Human DP e l i K T v T I N A S s S r S g L D D I N P T V L I K Guinea pig D P Q l a K T v T I N A S A S H S R L e D I s P T V L I K Sheep D a h l T K T v T I N A S s S H S g L D D I N P T V L I K
<b>Stability:</b>	≥2 years at -20°C
<b>Applications:</b>	Western blot - 1:XXX. The antibody can also be used for immunohistochemistry (recommended starting dilution 1:300-1:600) and immunocytochemistry. The best working dilution must be determined empirically. <sup>2-5</sup>

COX catalyzes the first step in the biosynthesis of prostaglandins, thromboxanes, and prostacyclins: the conversion of arachidonic acid to prostaglandin H<sub>2</sub>. Recent discoveries of the induction of COX by a variety of stimuli such as phorbol esters, lipopolysaccharides, and cytokines led to the hypothesis that the inducible form of COX, COX-2, is responsible for the biosynthesis of prostaglandins under acute inflammatory conditions.<sup>6,7</sup> COX-2 is a 72 kDa protein which has been cloned from a variety of species including human, mouse, rat, and sheep.<sup>8-11</sup>

### References

1. Fletcher, B.S., Kujubu, D.A., Perrin, D.M., *et al.* *J. Biol. Chem.* **267**, 4338-4344 (1992).
2. Pomerantz, K.B., Summers, B., and Hajjar, D.P. *Biochemistry* **32**, 13624-13635 (1993).
3. Harris, R.C., McKanna, J.A., Akai, Y., *et al.* *J. Clin. Invest.* **94**, 2504-2510 (1994).
4. Langenbach, R., Morham, S.G., Tiano, H.F., *et al.* *Cell* **83**, 483-492 (1995).
5. Morham, S.G., Langenbach, R., Loftin, C.D., *et al.* *Cell* **83**, 473-482 (1995).
6. Xie, W., Chipman, J.G., Robertson, D.L., *et al.* *Proc. Nat. Acad. Sci USA* **88**, 2692-2696 (1991).
7. Smith, W.L., Garavito, R.M., and DeWitt, D.L. *J. Biol. Chem.* **271**, 33157-33160 (1996).
8. Hla, T. and Neilson, K. *Proc. Nat. Acad. Sci USA* **89**, 7384-7388 (1992).
9. Kujubu, D.A., Fletcher, B.S., Varnum, B.C., *et al.* *J. Biol. Chem.* **266**, 12866-12872 (1991).
10. Yamagata, K., Andreasson, K.I., Kaufmann, W.E., *et al.* *Neuron* **11**, 371-386 (1993).
11. Zhang, V., O'Sullivan, M., Hussain, H., *et al.* *Biochem. Biophys. Res. Commun.* **227**, 499-506 (1996).

### Related Products

COX-1 (ovine) - Cat. No. 60100 • COX-2 (ovine) - Cat. No. 60120 • COX Polyclonal Antibody - Cat. No. 160103 • COX-2 (human) Polyclonal Antibody - Cat. No. 160107 • COX-1 (ovine) Polyclonal Antiserum - Cat. No. 160108 • COX-1 (murine) Polyclonal Antibody - Cat. No. 160109 • COX-1 Monoclonal Antibody - Cat. No. 160110 • COX-1 Monoclonal FITC Antibody - Cat. No. 160111 • COX-2 Monoclonal Antibody - Cat. No. 160112 • COX-2 Monoclonal FITC Antibody - Cat. No. 160113 • COX-2 (murine) Polyclonal Antiserum - Cat. No. 160116 • COX-1 Monoclonal PE Antibody - Cat. No. 160120 • COX-2 Monoclonal PE Antibody - Cat. No. 160122 • COX-2 (murine) Blocking Peptide - Cat. No. 360106 • COX-2 (ovine) Electrophoresis Standard - Cat. No. 360120 • Goat Anti-Rabbit IgG HRP - Cat. No. 10004301

### 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

**WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.**

### 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 under separate cover to the MSDS supervisor at 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, 01/28/2009