

# Product Information



## COX-2 (mouse) Polyclonal Antibody

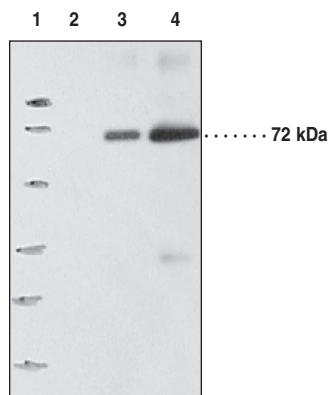
Item No. 160126 • Lot No. XXXXXX

- Contents:** This vial contains (100-500 µg of lyophilized IgG, *lot specific*). This is sufficient antibody for ten (10 x 10 cm) immunoblots.
- Host:** Rabbit
- Antigen:** The COX-2 polyclonal antibody was raised against a peptide corresponding to amino acids 584-598 of murine COX-2.
- Cross-reactivity:** (+) mouse, rat, human, and ovine COX-2; expected to be reactive with bovine and canine COX-2; other species not tested; (-) COX-1 from all species.
- Storage:** ≥1 year at -20°C
- Applications:** Immunohistochemistry (IHC); the antibody can be used for IHC on formalin-fixed paraffin-embedded tissues. The best working dilution for this application must be determined empirically. A recommended starting dilution is in the range of 1:*lot specific* to 1:500. Immunoblotting: for western blotting use a dilution of 1:1,000 (0.5 µg/ml).
- Concentration:** Varies by lot, from 0.2-1.0 mg/ml (100-500 µg/vial). Always 100 µl final working volume for western blotting.

Cyclooxygenase (COX) catalyzes the first step in the biosynthesis of prostaglandins (PGs), thromboxanes, and prostacyclins: the conversion of arachidonic acid to PGH<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 PGs under acute inflammatory conditions.<sup>1,2</sup> COX-2 is a 72 kDa protein which has been cloned from a variety of species including human, mouse, rat, and sheep.<sup>3-6</sup>

### References

1. Xie, W., Chipman, J.G. *Proc. Nat. Acad. Sci USA* **88**, 2692-2696 (1991).
2. Smith, W.L., Garavito, R.M., and DeWitt, D.L. *J. Biol. Chem.* **271**, 33157-33160 (1996).
3. Hla, T. and Neilson, K. *Proc. Nat. Acad. Sci USA* **89**, 7384-7388 (1992).
4. Kujubu, D.A., Fletcher, B.S., Varnum, B.C., *et al. J. Biol. Chem.* **266**, 12866-12872 (1991).
5. Yamagata, K., Andreasson, K.I., Kaufmann, W.E., *et al. Neuron* **11**, 371-386 (1993).
6. Zhang, V., O'Sullivan, M., Hussain, H., *et al. Biochem. Biophys. Res. Commun.* **227**, 499-506 (1996).



Lane 1: Low MW pre-stained standards  
Lane 2: Purified ovine COX-1 (0.25 µg)  
Catalog No. 360100  
Lane 3: Purified ovine COX-2 (0.05 µg)  
Catalog No. 360120  
Lane 4: RAW 264.7 cell lysate (20 µg)

### Related Products

COX-1 (ovine) - Item No. 60100 • COX-2 (ovine) - Item No. 60120 • COX-2 (murine) Polyclonal Antibody - Item No. 160106 • COX-2 (human) Polyclonal Antibody - Item No. 160107 • COX-1 (ovine) Polyclonal Antiserum - Item No. 160108 • COX-1 (murine) Polyclonal Antibody - Item No. 160109 • COX-1 Monoclonal Antibody - Item No. 160110 • COX-1 Monoclonal FITC Antibody - Item No. 160111 • COX-2 Monoclonal Antibody - Item No. 160112 • COX-2 Monoclonal FITC Antibody - Item No. 160113 • COX-2 (murine) Polyclonal Antiserum - Item No. 160116 • COX-1 Monoclonal PE Antibody - Item No. 160120 • COX-2 (human) Blocking Peptide - Item No. 360107 • Murine Macrophage Microsomal Immunoblot Control - Item No. 10004910

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**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.

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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.

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