



## Mouse monoclonal anti- rat Cyclooxygenase II (COX II)

**Description:** Cyclooxygenase (COX), also known as Prostaglandin H2 synthase and Prostaglandin endoperoxide synthase, is a key enzyme in the of conversion arachidonic acid to Prostaglandin H2. Prostaglandin H2 is converted by other enzymes into inflammatory mediators prostaglandin (PG) D2, PGE2, PGF2a, PGI2 and Thromboxane A2. Thus, COX is a key enzyme in the production of inflammatory agents and is the target of intense research and drug discovery activities. There are two enzymes of COX, COX-1 and COX-2. COX-1 is constitutively produced in many (most) cell types. It is important in the gut for the production of prostaglandins, which inhibit gastric secretion. It can be induced in monocytes, macrophages and other cells. It is induced as part of the inflammatory response by IL-1beta and other cytokines. It is induced by growth factors such as EGF and PDGF. Expression is inhibited by glucocorticosteroids such as cortisol and dexamethasone. Lipopolysaccharide in bacterial infections induces COX-2. COX-2 is also found in elevated levels in synoviocytes from rheumatoid arthritis patients. The discomforts of inflammation such as pain and swelling are largely due to the action of prostaglandins produced by COX-2.

**Product:** Mouse monoclonal anti rat cyclooxygenase 2.

**Clone:** AS73

**Specificity:** Rat

**Isotype:** Mouse IgG1.

**Form:** Purified mouse IgG.

**Formulation:** Provided as 0.2µm sterile filtered solution in phosphate buffered saline with 0.08% sodium azide.

**Application:** EIA - other applications under development.

**Storage:** Antibodies should be stored at -20 ° C. Aliquot to avoid freeze/thaw cycles.

**Stability:** Antibodies are stable for one year from purchase if stored frozen.

Ordering Information:	Form	Vial Size	Catalog #
	Purified	100 µg	A093M

**For research use only. Not for use in human diagnostics or therapeutics.**