



# Cox-2 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-02543                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Name</b>                   | PTGS2                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human Cox2. AA range:555-604                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specificity</b>                 | Cox-2 Monoclonal Antibody detects endogenous levels of Cox-2 protein.                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                              |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Synonyms</b>                    | COX2;PTGS2;COX2/ Cyclooxygenase 2;Cyclooxygenase 2;Cyclooxygenase-2; Prostaglandin G/H synthase 2;COX-2;PHS II;Prostaglandin H2 synthase 2;PGH synthase 2;PGHS-2;Prostaglandin-endoperoxide synthase 2                                                                                                                                                                                                                                                            |
| <b>Observed Band</b>               | 70kD                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Calculated Molecular Weight</b> | 70kD                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Cell Pathway</b>                | Microsome membrane ; Peripheral membrane protein. Endoplasmic reticulum membrane ; Peripheral membrane protein. Nucleus inner membrane ; Peripheral membrane protein. Nucleus outer membrane ; Peripheral membrane protein. Detected on the luminal side of the endoplasmic reticulum and nuclear envelope. .                                                                                                                                                     |
| <b>Tissue Specificity</b>          | Endothelial cell,Epidermal keratinocytes in primary culture,Lung,Pe                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Function</b>                    | catalytic activity:Arachidonate + AH(2) + 2 O(2) = prostaglandin H(2) + A + H(2) O.,cofactor:Binds 1 heme B (iron-protoporphyrin IX) group per subunit., disease:Likely to play a role in inflammatory diseases such as rheumatoid arthritis.,function:May have a role as a major mediator of inflammation and/or a role for prostanoid signaling in activity-dependent plasticity.,induction:By cytokines and mitogens.,miscellaneous:This enzyme acts both as a |



dioxygenase and as a peroxidase.,miscellaneous:This enzyme is the target of nonsteroidal anti-inflammatory drugs such as aspirin.,pathway:Lipid metabolism; prostaglandin biosynthesis.,similarity:Belongs to the prostaglandin G/H synthase family.,similarity:Contains 1 EGF-like domain.,subunit:Homodimer.,

## Background

Prostaglandin-endoperoxide synthase (PTGS), also known as cyclooxygenase, is the key enzyme in prostaglandin biosynthesis, and acts both as a dioxygenase and as a peroxidase. There are two isozymes of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. This gene encodes the inducible isozyme. It is regulated by specific stimulatory events, suggesting that it is responsible for the prostanoid biosynthesis involved in inflammation and mitogenesis. [provided by RefSeq, Feb 2009],

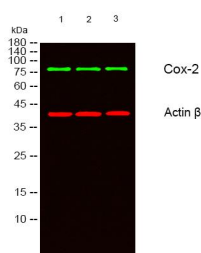
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using Cox-2 Monoclonal Antibody