

# Cycloxygenase-2 (COX-2) Antibody

Mouse Monoclonal Antibody [Clone COX2/1941]

| Catalog No      | Format  | Size   |
|-----------------|---|--------|
| 5743-MSM1-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  |
| 5743-MSM1-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug |
| 5743-MSM1-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

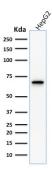
| Applications      | Tested Dillution | Note |
|-------------------|------------------|------|
| Western Blot (WB) | 2-4ug/ml         |      |

## **Product Details**

| Clone                  | COX2/1941  |  |
|------------------------|--|--|
| Gene Name              | PTGS2  |  |
| Immunogen              | Recombinant human COX2 protein fragment (around aa 442-572) (exact sequence is proprietary)        |  |
| Host                   | Mouse  |  |
| Clonality              | Monoclonal   |  |
| Isotype / Light Chain  | IgG2b / Kappa  |  |
| Mol. Weight of Antigen | 70-72kDa   |  |
| Cellular Localization  | Endoplasmic reticulum membrane, Microsome membrane, Nucleus inner membrane, Nucleus outer membrane |  |
| Species Reactivity     | Human  |  |
| Positive Control       | Colon or Lung Carcinoma. HepG2 cells.  |  |

\*Optimal dilution for a specific application should be determined.

# Product Images for Cycloxygenase-2 (COX-2) Antibody



Western Blot Analysis of human HepG2 cell lysate using COX-2 Mouse Monoclonal Antibody (COX2/1941).

SDS-PAGE Analysis of Purified COX-2 Mouse Monoclonal Antibody (COX2/1941). Confirmation of Integrity and Purity of Antibody.



## **Specificity & Comments**

Prostaglandins are a diverse group of autocrine and paracrine hormones that mediate many cellular and physiologic processes. Prostaglandin H2 (PGH2) is an intermediate molecule in formation of the prostaglandins. Cyclooxygenase-1 (Cox-1) and cyclooxygenase-2 (Cox-2) are prostaglandin synthases that catalyze the formation of PGH2 from arachidonic acid (AA). Cox-1 and Cox-2 are isozymes of prostaglandin-endoperoxidase synthase (PTGS). Cox-1 is constitutively expressed in most tissues and is thought to serve in general housekeeping functions. Cox-2 is efficiently induced in migratory cells responding to pro-inflammatory stimuli and is considered to be an important mediator of inflammation. Both enzymes are targets for the nonsteroidal therapeutic antiinflammatory drugs, NSAIDs. COX2 expression is significantly increased in 85-90% of human colorectal adenocarcinomas whereas levels of COX-1 are not changed.

#### Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

# **Storage and Stability**

Antibody with azide - store at 2 to  $8^{\circ}$ C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## **Research Areas**

Cardiovascular, Immunology, Neuroscience, Angiogenesis, Colon Cancer, Cytokine Signaling, Lung Cancer

#### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

