

## Cyclooxygenase-2 (COX-2) Antibody

Mouse Monoclonal Antibody [Clone COX2/2377]

Catalog No	Format	Size
5743-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5743-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5743-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

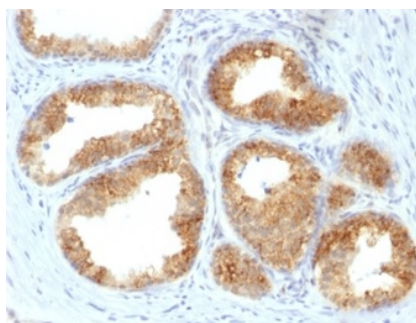
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

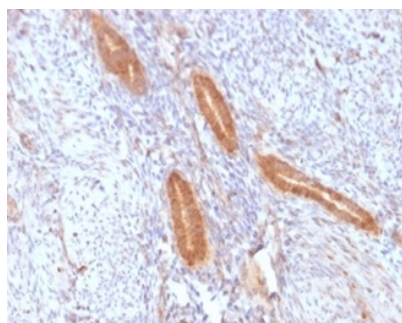
<b>Clone</b>	COX2/2377
<b>Gene Name</b>	PTGS2
<b>Immunogen</b>	Recombinant human COX2 protein fragment (around aa 442-572) (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2a / Kappa
<b>Mol. Weight of Antigen</b>	70-72kDa
<b>Cellular Localization</b>	Endoplasmic reticulum membrane, Microsome membrane, Nucleus inner membrane, Nucleus outer membrane
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Human colon or lung carcinoma. HepG2 cells.

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

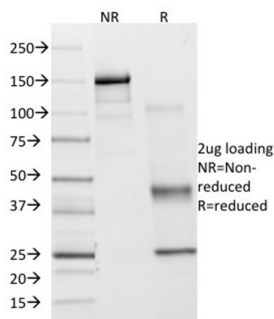
### Product Images for Cyclooxygenase-2 (COX-2) Antibody



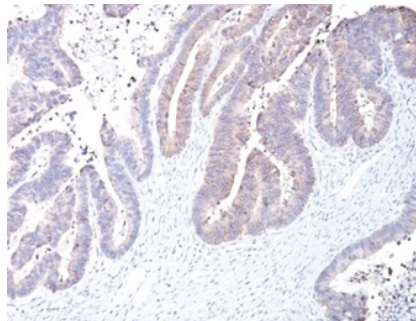
Formalin-fixed, paraffin-embedded human prostate cancer stained with COX-2 Mouse Monoclonal Antibody (COX2/2377).



Formalin-fixed, paraffin-embedded human endometrium stained with COX-2 Mouse Monoclonal Antibody (COX2/2377).



SDS-PAGE Analysis of Purified COX-2 Mouse Monoclonal Antibody (COX2/2377). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human colon carcinoma stained with COX-2 Mouse Monoclonal Antibody (COX2/2377).

### Specificity & Comments

Prostaglandins are a diverse group of autocrine and paracrine hormones that mediate many cellular and physiologic processes. Prostaglandin H<sub>2</sub> (PGH<sub>2</sub>) 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 PGH<sub>2</sub> 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 anti-inflammatory drugs, NSAIDs. COX2 expression is significantly increased in 85-90% of human colorectal adenocarcinomas whereas levels of COX-1 are not changed.

### 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.

### 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 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

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