



# COX2 Monoclonal Antibody(3D4)

<b>Catalog No</b>	YP-Ab-02376
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	IHC;IF
<b>Gene Name</b>	PTGS2
<b>Protein Name</b>	Prostaglandin G/H synthase 2
<b>Immunogen</b>	Synthetic Peptide of COX2
<b>Specificity</b>	The antibody detects endogenous COX2 proteins.
<b>Formulation</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Dilution</b>	IHC: 1:200. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PTGS2; COX2; Prostaglandin G/H synthase 2; Cyclooxygenase-2; COX-2; PHS II; Prostaglandin H2 synthase 2; PGH synthase 2; PGHS-2; Prostaglandin-endoperoxide synthase 2
<b>Observed Band</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],

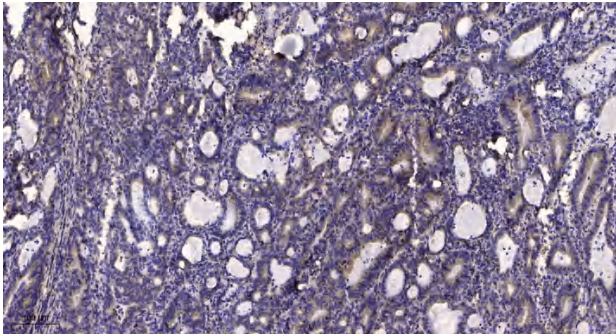
**matters needing attention**

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



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).