

## COX-2 Polyclonal Antibody

<b>Catalog No :</b>	YT1073
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	COX2
<b>Fields :</b>	>>Arachidonic acid metabolism;>>Metabolic pathways;>>NF-kappa B signaling pathway;>>VEGF signaling pathway;>>C-type lectin receptor signaling pathway;>>IL-17 signaling pathway;>>TNF signaling pathway;>>Retrograde endocannabinoid signaling;>>Serotonergic synapse;>>Ovarian steroidogenesis;>>Oxytocin signaling pathway;>>Regulation of lipolysis in adipocytes;>>Alzheimer disease;>>Pathways of neurodegeneration - multiple diseases;>>Leishmaniasis;>>Human cytomegalovirus infection;>>Human papillomavirus infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Pathways in cancer;>>Chemical carcinogenesis - DNA adducts;>>MicroRNAs in cancer;>>Small cell lung cancer
<b>Gene Name :</b>	PTGS2
<b>Protein Name :</b>	Prostaglandin G/H synthase 2
<b>Human Gene Id :</b>	5743
<b>Human Swiss Prot No :</b>	P35354
<b>Mouse Swiss Prot No :</b>	Q05769
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Cox2. AA range:555-604
<b>Specificity :</b>	Cox-2 Polyclonal 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>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not

yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 70kD

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**Cell Pathway :** Arachidonic acid metabolism;VEGF;Pathways in cancer;Small cell lung cancer;

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**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],

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**Function :** 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.,

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**Subcellular Location :** 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.

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**Expression :** Endothelial cell,Epidermal keratinocytes in primary culture,Lung,Pe

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**Tag :** orthogonal,hot

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**Sort :** 1

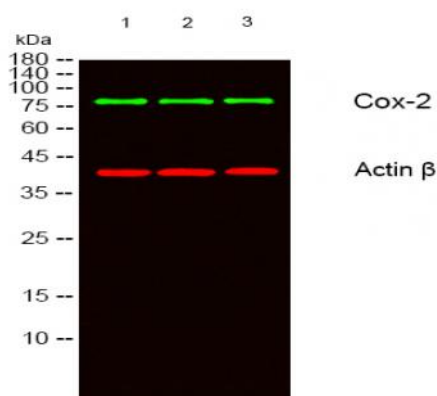
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**No3 :** ab179800

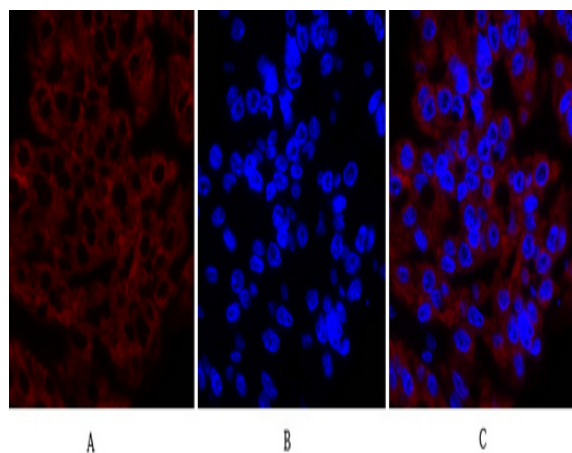
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<b>No4 :</b>	1
<b>Host :</b>	Rabbit
<b>Modifications :</b>	Unmodified

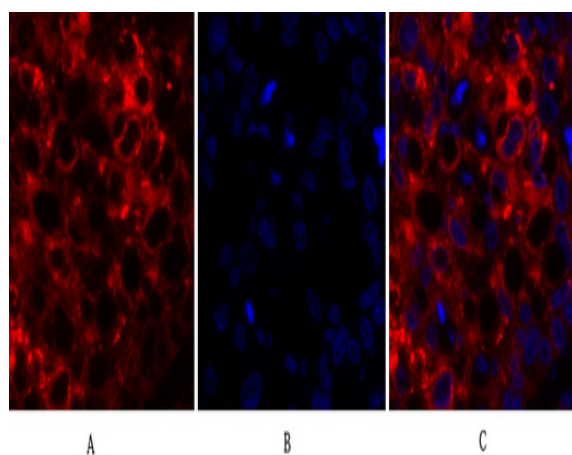
## Products Images



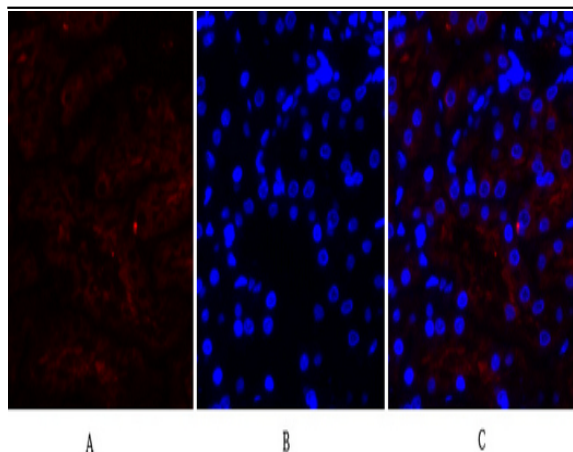
Western blot analysis of lysates from 1) A549, 2) HELA, 3) MCF-7 cells, [Green] primary antibody was diluted at 1:1000, 4° over night, secondary antibody (cat:RS23920) was diluted at 1:10000, 37° 1 hour. [Red] Actin  $\beta$  Monoclonal Antibody (5B7) (cat:YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody (cat:RS23710) was diluted at 1:10000, 37° 1 hour.



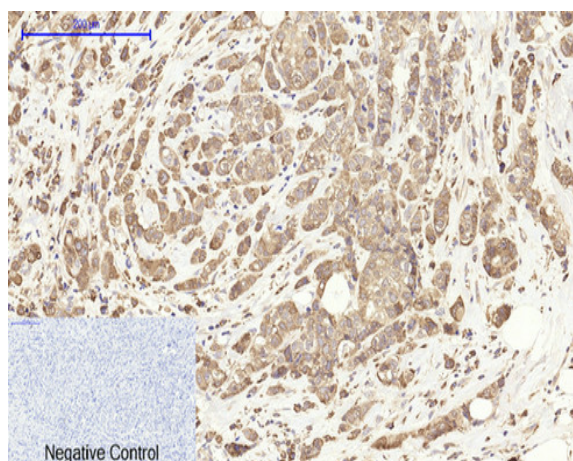
Immunofluorescence analysis of human-liver-cancer tissue. 1, Cox-2 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



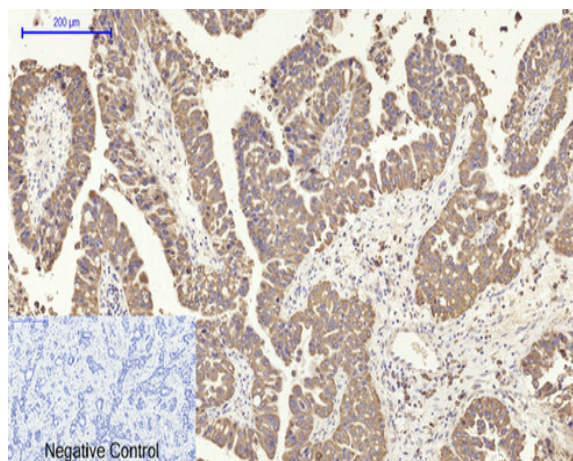
Immunofluorescence analysis of human-lung-cancer tissue. 1, Cox-2 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of human-kidney tissue. 1, Cox-2 Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

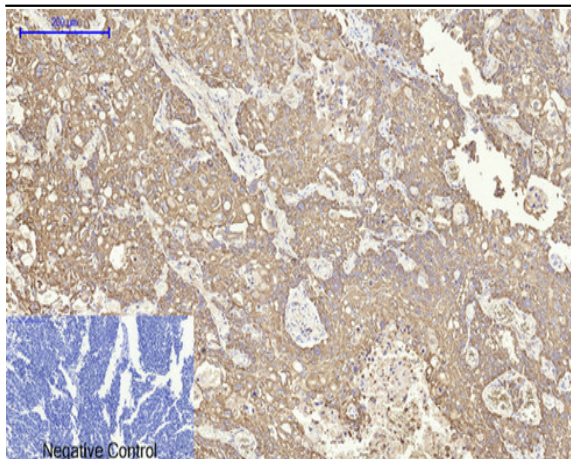


Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1, Cox-2 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.

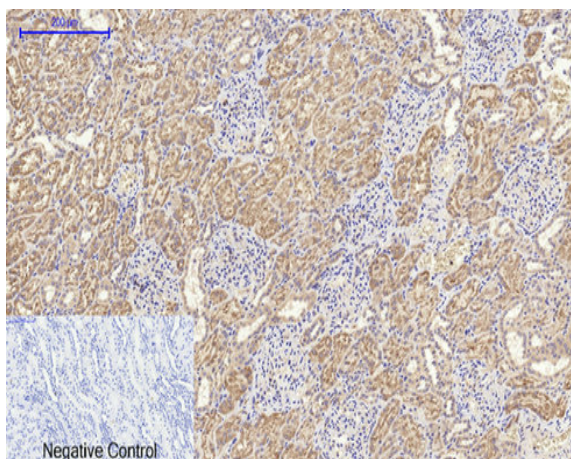


Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1, Cox-2 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.

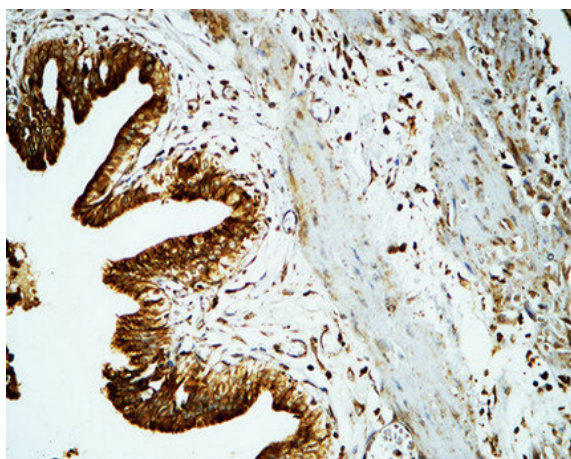




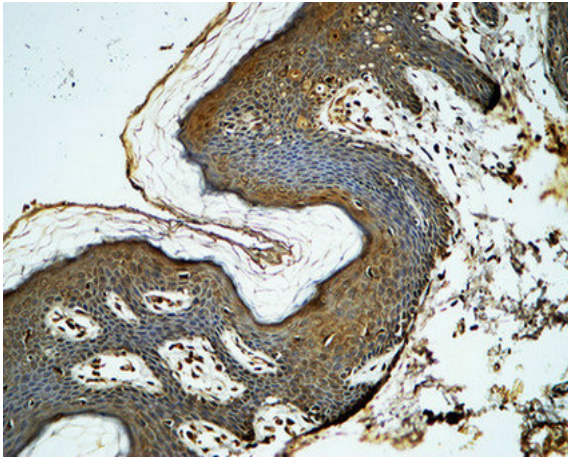
Immunohistochemical analysis of paraffin-embedded Human lung-cancer tissue. 1, Cox-2 Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



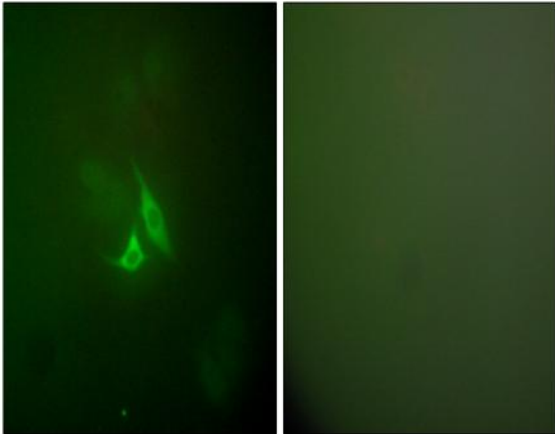
Immunohistochemical analysis of paraffin-embedded Human kidney tissue. 1, Cox-2 Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human gallbladder. 1, Antibody was diluted at 1:200(4 °C overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human skin. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of A549 cells, using Cox2 Antibody. The picture on the right is blocked with the synthesized peptide.