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**Product Name: COX2 Rabbit Polyclonal Antibody****Catalog #: APRab09272**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Rat,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	70kDa

**Antigen Information**

<b>Gene Name</b>	PTGS2 PTGS2; COX2; Prostaglandin G/H synthase 2; Cyclooxygenase-2; COX-2; PHS II;
<b>Alternative Names</b>	Prostaglandin H2 synthase 2; PGH synthase 2; PGHS-2; Prostaglandin-endoperoxide synthase 2
<b>Gene ID</b>	5743.0
<b>SwissProt ID</b>	P35354
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Cox2. AA range:555-604

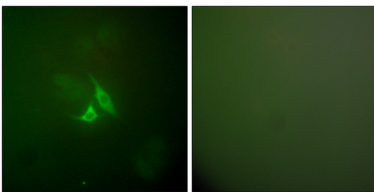
## Background

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],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.,

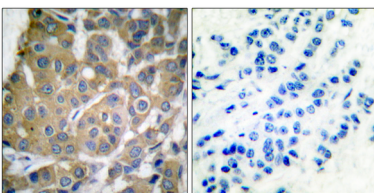
## Research Area

Arachidonic acid metabolism;VEGF;Pathways in cancer;Small cell lung cancer;

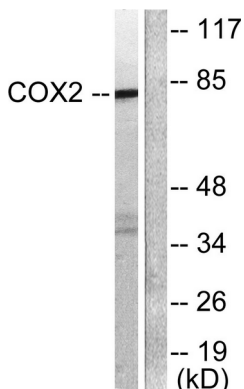
## Image Data



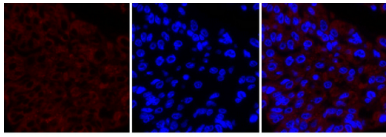
Immunofluorescence analysis of A549 cells, using Cox2 Antibody. The picture on the right is blocked with the synthesized peptide.



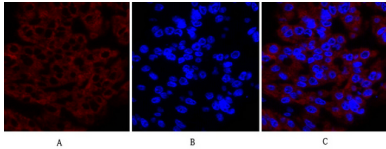
Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Cox2 Antibody. The picture on the right is blocked with the synthesized peptide.



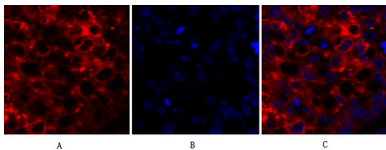
Western blot analysis of lysates from A549 cells, using Cox2 Antibody. The lane on the right is blocked with the synthesized peptide.



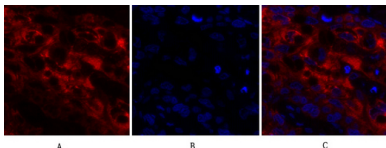
Immunofluorescence analysis of human-liver-cancer tissue. 1,Cox-2 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue ) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of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



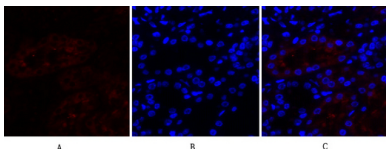
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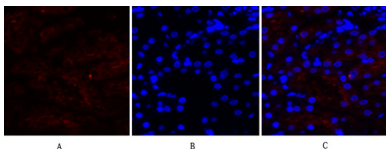
Immunofluorescence analysis of human-lung-cancer tissue. 1,Cox-2 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue ) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



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



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