



Cox-2 Polyclonal Antibody

Catalog No	YP-Ab-02543
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	PTGS2
Protein Name	Prostaglandin G/H synthase 2
Immunogen	The antiserum was produced against synthesized peptide derived from human Cox2. AA range:555-604
Specificity	Cox-2 Polyclonal Antibody detects endogenous levels of Cox-2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	70kD
Cell Pathway	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.
Tissue Specificity	Endothelial cell,Epidermal keratinocytes in primary culture,Lung,Pe
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.,

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

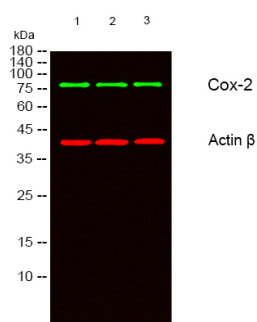
Avoid repeated freezing and thawing!

Usage suggestions

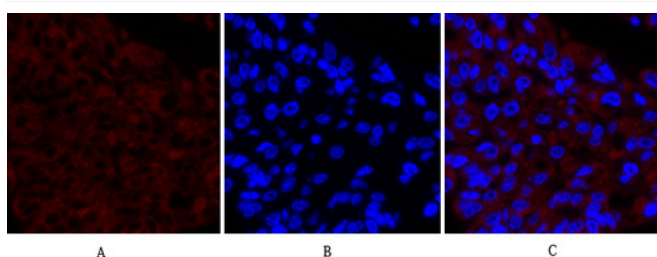
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



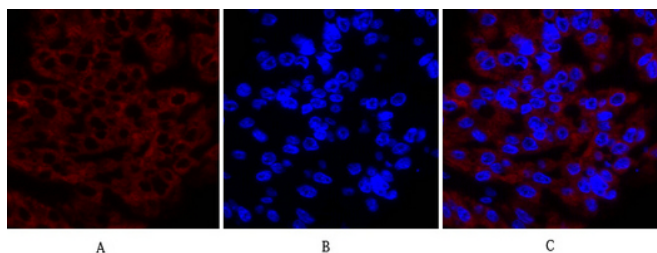
Products Images



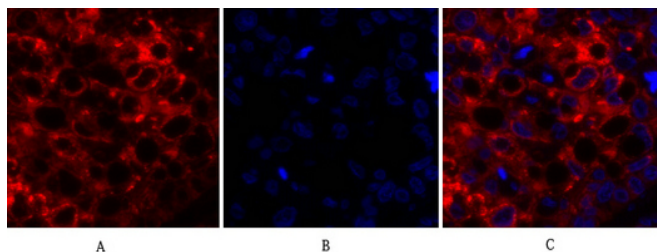
Western blot analysis of lysates from 1) A549, 2) HELA, 3) MCF-7 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody(5B7) (cat:YM3028) antibody was diluted at 1:5000 as loading control,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



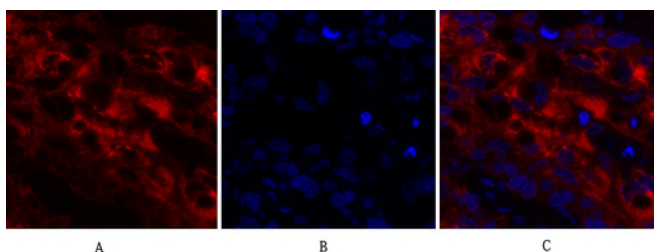
Immunofluorescence analysis of human-liver-cancer tissue. 1, Cox-2 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of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