

For Research Use Only

# COX2/ Cyclooxygenase 2/ PTGS2

## Polyclonal antibody

Catalog Number: 12375-1-AP

Featured Product

476 Publications



### Basic Information

Catalog Number:

12375-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3025

GenBank Accession Number:

BC013734

GeneID (NCBI):

5743

UNIPROT ID:

P35354

Full Name:

prostaglandin-endoperoxide synthase  
2 (prostaglandin G/H synthase and  
cyclooxygenase)

Calculated MW:

604 aa, 68 kDa

Observed MW:

70-74 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

### Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF, ColP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, pig, chicken

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB : A549 cells, RAW 264.7 cells, HeLa cells, NIH/3T3  
cells, HEK-293 cells, Raji cells

IHC : human breast cancer tissue,

IF/ICC : A549 cells,

### Background Information

COX2 (Prostaglandin G/H synthase 2; PTGS2) mediates the formation of prostaglandins from arachidonate. Its subunit structure is homodimer. The fully N-glycosylated PTGS2 is 72-74 kDa and the aglycosylated is 66 kDa (PMID:19656660). It also expresses a band of 39 kDa after unspecific cleavage (PMID:17509125). The 50 kDa band of fragmented PTGS2 has also previously been detected in AD brains (PMID:14724276).

### Notable Publications

Author	Pubmed ID	Journal	Application
Guangren Xu	32986614	Z Naturforsch C J Biosci	WB
Jie-Fu Fan	36189462	J Hypertens	WB
Ke-Xin Wang	34649212	Phytomedicine	WB

### Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

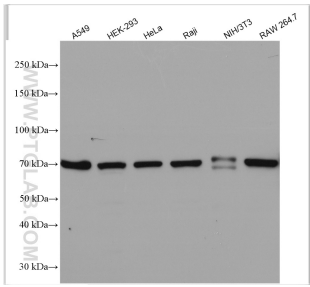
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

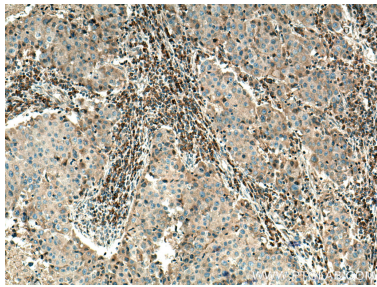
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

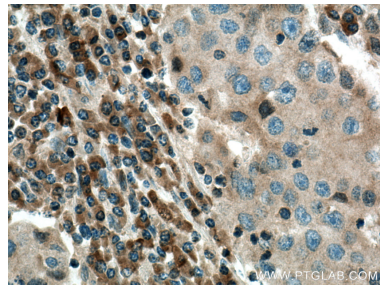
Selected Validation Data



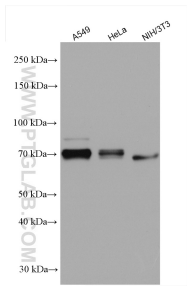
Various lysates were subjected to SDS PAGE followed by western blot with 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



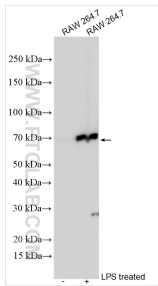
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



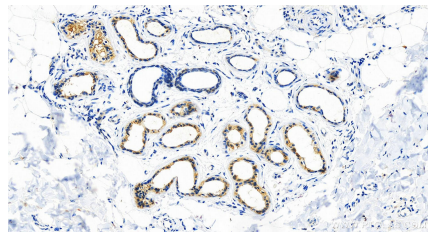
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



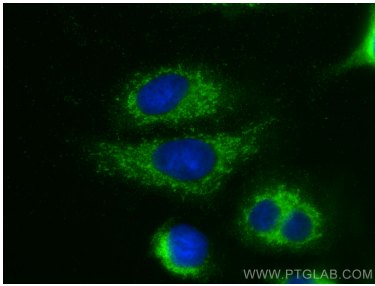
A549 cells were subjected to SDS PAGE followed by western blot with 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human bowen disease slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using COX2/ Cyclooxygenase 2/ PTGS2 antibody (12375-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).