

For Research Use Only

# COX2/ Cyclooxygenase 2/ PTGS2 Polyclonal antibody

Catalog Number: 12375-1-AP

Featured Product

448 Publications



## Basic Information

### Catalog Number:

12375-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### 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

\*\*\* 20ul sizes contain 0.1% BSA

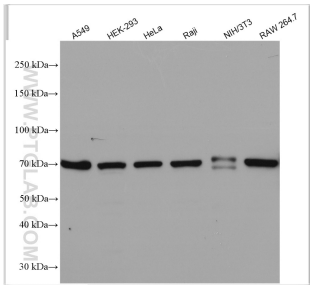
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

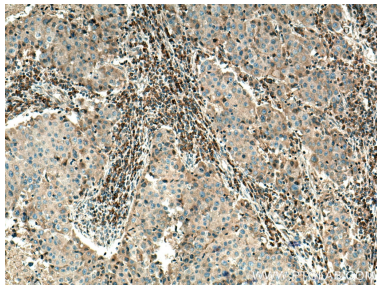
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

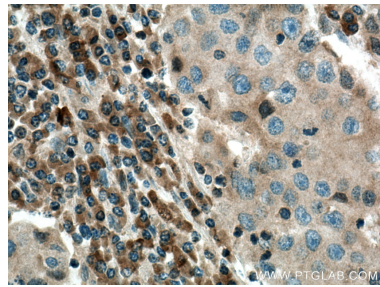
Selected Validation Data



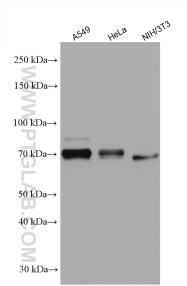
Various lysates were subjected to SDS PAGE followed by western blot with 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



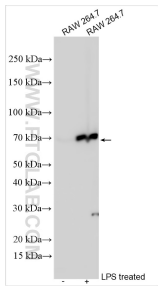
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



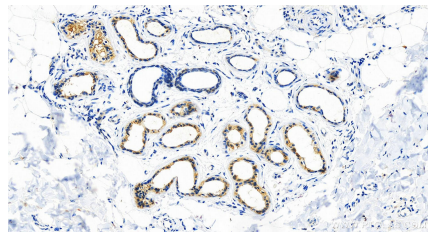
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



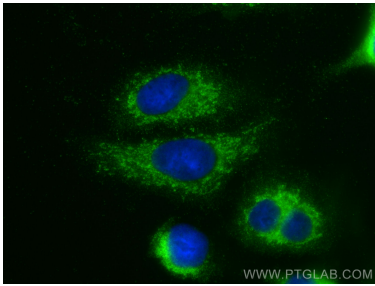
A549 cells were subjected to SDS PAGE followed by western blot with 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



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 bown 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).