For Research Use Only

## COX2/ Cyclooxygenase 2/ PTGS2 Polyclonal antibody



**Purification Method:** 

WB 1:1000-1:4000 IHC 1:50-1:500

IF 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

WB: A549 cells, RAW 264.7 cells, Raji cells, HeLa cells,

Catalog Number: 12375-1-AP

**Featured Product** 

299 Publications

BC013734

GeneID (NCBI):

**UNIPROT ID:** 

cyclooxygenase)

Calculated MW: 604 aa, 68 kDa Observed MW: 70-74 kDa

P35354 Full Name:

GenBank Accession Number:

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

Positive Controls:

IF: HepG2 cells,

NIH/3T3 cells, HEK-293 cells

IHC: human breast cancer tissue,

**Basic Information** 

Catalog Number: 12375-1-AP Size: 700 μg/ml Source: Rabbit Isotype:

Immunogen Catalog Number: AG3025

**Applications** 

**Tested Applications:** IF/ICC, IHC, WB, ELISA Cited Applications: IF. IHC. WB Species Specificity: human, mouse **Cited Species:** 

human, chicken, rat, mouse, pig

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

**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 pH 7.3.

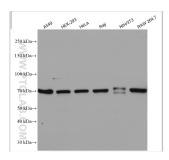
Aliquoting is unnecessary for -20°C storage

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

T: 4006900926 E: Proteintech-CN@ptglab.com

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

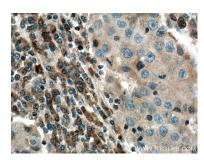
## **Selected Validation Data**



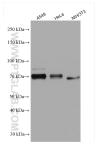
Various lysates were subjected to SDS PAGE followed by western blot with 12375-1-AP (COX2/Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



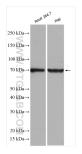
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



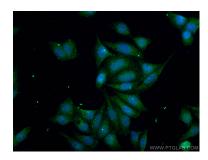
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 12375-1-AP (COX2/ Cyclooxygenase 2/ PTGS2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 1:500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using COX2/ Cyclooxygenase 2/ PTGS2 antibody (12375-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).