

For Research Use Only

# CA12 Polyclonal antibody

Catalog Number: 15180-1-AP

Featured Product

21 Publications



## Basic Information

### Catalog Number:

15180-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop and 427 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7107

### GenBank Accession Number:

BC000278

### GeneID (NCBI):

771

### UNIPROT ID:

O43570

### Full Name:

carbonic anhydrase XII

### Calculated MW:

39 kDa

### Observed MW:

44 kDa, 75-80 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:500-1:2000

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**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, BxPC-3 cells, MCF-7 cells

IHC : human brown disease, human pancreas tissue

## Background Information

CA12 belongs to the alpha-carbonic anhydrase family. It reverses the hydration of carbon dioxide. Overexpression of the zinc enzyme CA12 is observed in certain human cancers. The structure reveals a prototypical CA fold; however, two CA12 domains associate to form an isologous dimer, an observation that is confirmed by studies of the enzyme in solution.

## Notable Publications

Author	Pubmed ID	Journal	Application
Pan-Ling Xu	34597654	J Ethnopharmacol	WB
Soyoung Hwang	31546841	Molecules	WB,IF
Sang-Woo Kim	28901294	Nanotechnology	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

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

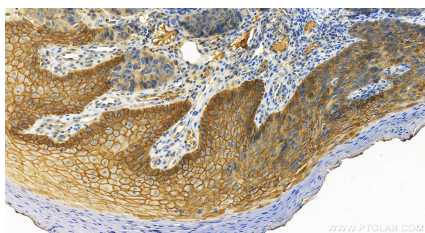
For technical support and original validation data for this product please contact:

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

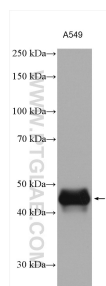
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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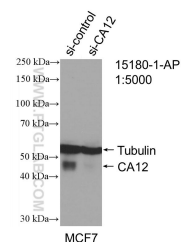
## Selected Validation Data



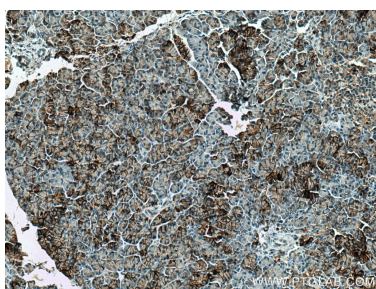
Immunohistochemical analysis of paraffin-embedded human brown disease slide using 15180-1-AP (CA12 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



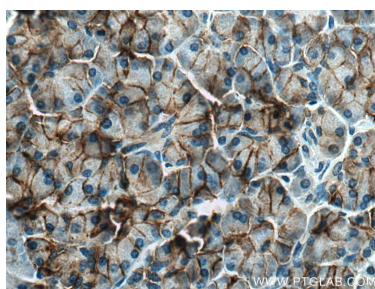
A549 cells were subjected to SDS PAGE followed by western blot with 15180-1-AP (CA12 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



WB result of CA12 antibody (15180-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CA12 transfected MCF-7 cells.



Immunohistochemical analysis of paraffin-embedded human pancreas tissue slide using 15180-1-AP (CA12 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas tissue slide using 15180-1-AP (CA12 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).