

For Research Use Only

# CA12 Polyclonal antibody

Catalog Number: 15180-1-AP

Featured Product

22 Publications



## Basic Information

Catalog Number:

15180-1-AP

Concentration:

700 ug/ml

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

Positive Controls:

WB : A549 cells, BxPC-3 cells, MCF-7 cells

IHC : human brown disease, human pancreas tissue

**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

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

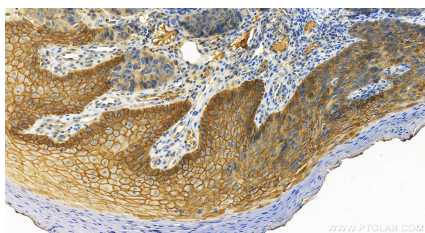
T: 4006900926

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

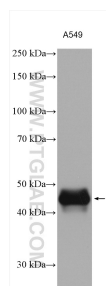
W: [ptgcn.com](http://ptgcn.com)

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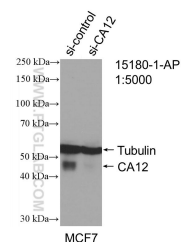
## Selected Validation Data



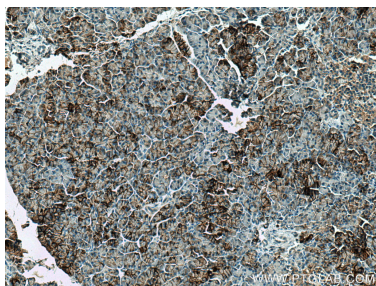
Immunohistochemical analysis of paraffin-embedded human brown disease slide using 15180-1-AP (CA12 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



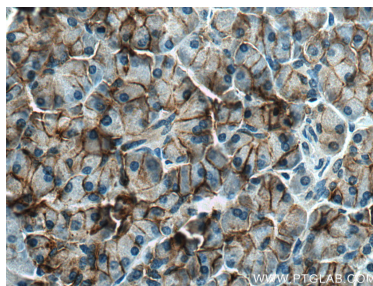
A549 cells were subjected to SDS PAGE followed by western blot with 15180-1-AP (CA12 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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).