

For Research Use Only

# CA12 Polyclonal antibody

Catalog Number: 15180-1-AP

Featured Product

18 Publications



## Basic Information

<b>Catalog Number:</b> 15180-1-AP	<b>GenBank Accession Number:</b> BC000278	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 700 µg/ml by Nanodrop and 427 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 771	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:250-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O43570	
<b>Isotype:</b> IgG	<b>Full Name:</b> carbonic anhydrase XII	
<b>Immunogen Catalog Number:</b> AG7107	<b>Calculated MW:</b> 39 kDa	
	<b>Observed MW:</b> 44 kDa, 75-80 kDa	

## Applications

<b>Tested Applications:</b> FC, IHC, WB, ELISA	<b>Positive Controls:</b> WB : A549 cells, BxPC-3 cells, MCF-7 cells IHC : human pancreas tissue, human kidney tissue
<b>Cited Applications:</b> WB,IP,IHC,IF	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

CA12 belongs to the alpha-carbonic anhydrase family. It reversible 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

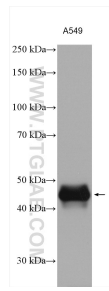
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

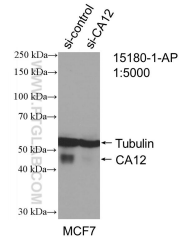
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

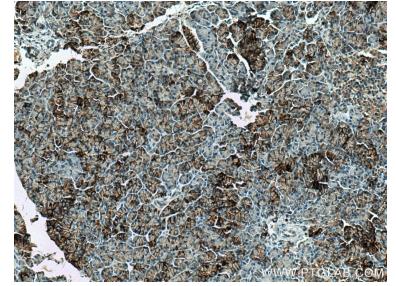
## Selected Validation Data



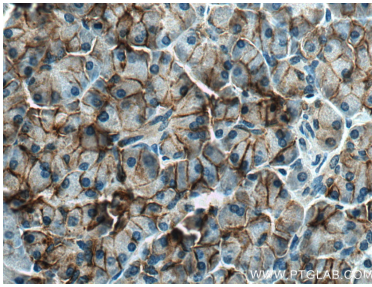
A549 cells were subjected to SDS PAGE followed by western blot with 15180-1-AP (CA12 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



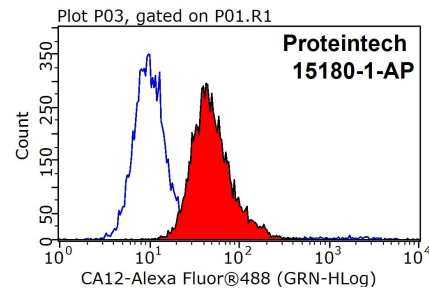
WB result of CA12 antibody (15180-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CA12 transfected MCF-7 cells.



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).



1X10<sup>6</sup> HEK-293 cells were stained with 0.2ug CA12 antibody (15180-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.