

For Research Use Only

CA12 Polyclonal ANTIBODY



Catalog Number: 15180-1-AP

Featured Product

8 Publications

Basic Information

Catalog Number:

15180-1-AP

Size:

150UL, Concentration: 427 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7107

GenBank Accession Number:

BC000278

GeneID (NCBI):

771

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 1:250-1:1000

Applications

Tested Applications:

FC, IHC, WB, ELISA

Cited Applications:

IF, IP, WB

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 pancreas tissue, human kidney tissue

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
Soyoung Hwang	31546841	Molecules	WB,IF
Sang-Woo Kim	28901294	Nanotechnology	WB
Zhenyu Wang	29073605	Cell Physiol Biochem	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

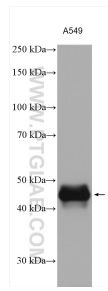
For technical support and original validation data for this product please contact:

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

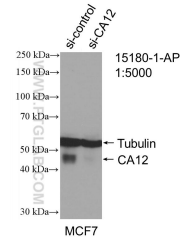
E: proteintech@ptglab.com
W: ptglab.com

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

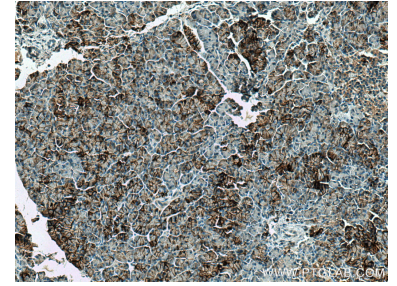
Selected Validation Data



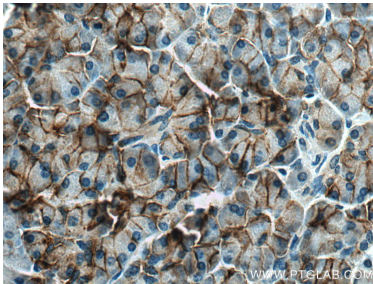
A549 cells were subjected to SDS PAGE followed by western blot with 15180-1-AP (CA12 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



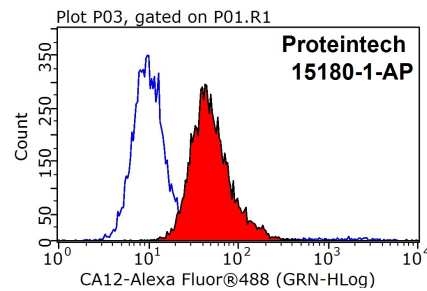
WB result of CA12 antibody (15180-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CA12 transfected MCF-7 cells.



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).



1×10^6 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.