

For Research Use Only

# Carbonic anhydrase 1/CA1 Polyclonal antibody

Catalog Number: 13198-2-AP

Featured Product

10 Publications



## Basic Information

### Catalog Number:

13198-2-AP

### Concentration:

1000 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3932

### GenBank Accession Number:

BC027890

### GeneID (NCBI):

759

### UNIPROT ID:

P00915

### Full Name:

carbonic anhydrase I

### Calculated MW:

261 aa, 29 kDa

### Observed MW:

29 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IP, 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** : mouse spleen tissue, Jurkat cells, rat spleen tissue

**IP** : K-562 cells,

**IHC** : human breast cancer tissue, human colon cancer tissue

## Background Information

CA1(Carbonic anhydrase 1) is also named as CAB and belongs to the alpha-carbonic anhydrase family, which may reside in cytoplasm, in mitochondria, or in secretory granules, or associate with membranes in cell. It forms a large family of genes encoding zinc metalloenzymes of great physiologic importance. Extracellular CA1 mediates hemorrhagic retinal and cerebral vascular permeability through prekallikrein activation(PMID:17259996).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jianming Yang	36114582	Microbiome	IF
Kazuhiro Tange	36289244	Sci Rep	WB,IHC,IP
Meili Lu	30364197	Front Pharmacol	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:

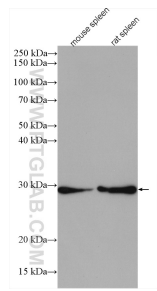
T: 4006900926

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

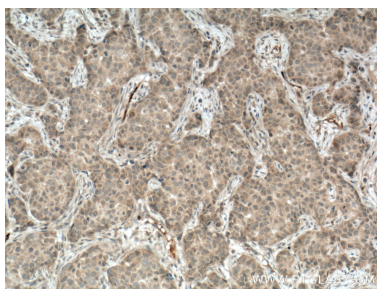
W: [ptgcn.com](http://ptgcn.com)

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

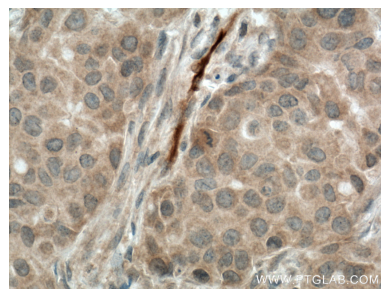
Selected Validation Data



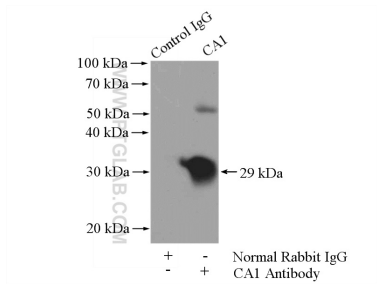
Various lysates were subjected to SDS PAGE followed by western blot with 13198-2-AP (CA1 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



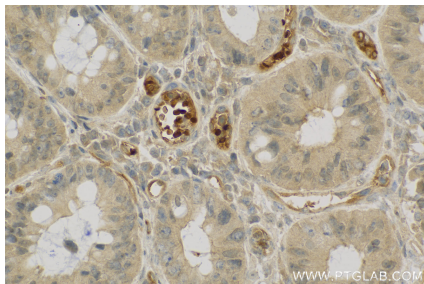
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13198-2-AP (CA1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13198-2-AP (CA1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CA1 (IP:13198-2-AP, 4ug; Detection:13198-2-AP 1:500) with K-562 cells lysate 1200ug.



Immunohistochemical analysis of paraffin-embedded Colorectal cancer slide using 13198-2-AP (CA1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).