

For Research Use Only

# CA2 Polyclonal antibody

Catalog Number: 16961-1-AP

11 Publications



## Basic Information

### Catalog Number:

16961-1-AP

### Size:

150ul, Concentration: 200 ug/ml by Nanodrop and 200 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10680

### GenBank Accession Number:

BC011949

### GeneID (NCBI):

760

### UNIPROT ID:

P00918

### Full Name:

carbonic anhydrase II

### Calculated MW:

260 aa, 29 kDa

### Observed MW:

29 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

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

## Applications

### Tested Applications:

WB, IP, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

WB: HEK-293 cells, human stomach tissue, mouse colon tissue, mouse kidney tissue, mouse ovary tissue, rat kidney tissue, U2OS cells

IP: mouse kidney tissue,

## Background Information

CA2(carbonic anhydrase II) is also called Car2, CA-II, and CAlI and belongs to the alpha-carbonic anhydrase family. It reversibly hydrates CO<sub>2</sub> in cellular ion transport and homeostasis. CA2 is essential for bone resorption and osteoclast differentiation. It regulates SLC9A1 activity via a phosphorylation-regulated CAlI binding site in SLC9A1 tail(PMID:16475831). It also may be involved in brain development (PMID:16825953). Defects in CA2 cause osteopetrosis autosomal recessive type 3 (OPTB3).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jeong Hee Hong	26486891	J Physiol	WB
Kalina Wiatr	34220448	Front Mol Neurosci	WB
Yanzhang Luo	28117408	Sci Rep	WB,IHC

## 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

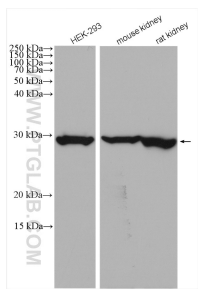
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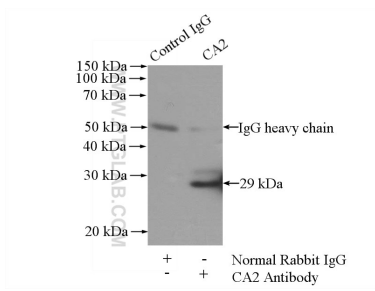
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 16961-1-AP (CA2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-CA2 (IP:16961-1-AP, 4ug; Detection:16961-1-AP 1:500) with mouse kidney tissue lysate 4000ug.