

# CA2

## Polyclonal ANTIBODY

Catalog Number: 16961-1-AP

3 Publications

### Basic Information

**Catalog Number:**  
16961-1-AP

**Size:**  
20 µg/150 µl

**Source:**  
Rabbit

**Isotype:**  
IgG

**Purification Method:**  
Antigen affinity purification

**Immunogen Catalog Number:**  
AG10680

**GenBank Accession Number:**  
BC011949

**GeneID (NCBI):**  
760

**Full Name:**  
carbonic anhydrase II

**Calculated MW:**  
260aa, 29 kDa

**Observed MW:**  
29 kDa

**Recommended Dilutions:**

WB 1:300-1:1000

IP 0.5-4.0 µg for IP and 1:500-1:1000 for WB

### Applications

**Tested Applications:**

IP, WB, ELISA

**Cited Applications:**

IHC, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse

**Note: 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 ovary tissue; rat kidney tissue, human stomach tissue, mouse colon tissue, mouse kidney tissue, U2OS cells

IP : mouse kidney tissue;

### Background Information

CA2(carbonic anhydrase II ) is also named as Car2, CA-II, CAII 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 CAII binding site in SLC9A1 tail(PMD:16475831). It also may be involved in the development of brain(PMD:16825953). Defects in CA2 are the cause of osteopetrosis autosomal recessive type 3 (OPTB3).

### Notable Publications

Author	Pubmed ID	Journal	Application
Jeong Hee Hong	26486891	J Physiol	WB
Yanzhang Luo	28117408	Sci Rep	WB, IHC
Khositseth Sookkasem S	20940332	Mol Cell Proteomics	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

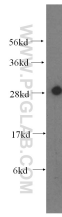
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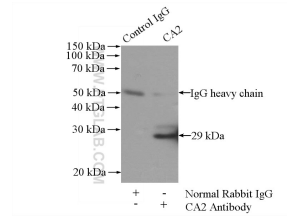
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## Selected Validation Data



mouse ovary tissue were subjected to SDS PAGE followed by western blot with 16961-1-AP(CA2 antibody) at dilution of 1:500 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.