## For Research Use Only

## CA2 Polyclonal antibody

Catalog Number: 16961-1-AP

10 Publications



**Basic Information** 

Catalog Number: 16961-1-AP

Size:

200 μg/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG10680

Calculated MW:

260 aa, 29 kDa Observed MW: 29 kDa

carbonic anhydrase II

BC011949

GeneID (NCBI):

**UNIPROT ID:** 

P00918 Full Name:

GenBank Accession Number:

**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:** 

IP, WB,ELISA

Cited Applications:

IHC, WB

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 named as Car2, CA-II, CAII and belongs to the alpha-carbonic anhydrase family. It reversibly hydrates CO2 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(PMID:16475831). It also may be involved in the development of brain(PMID: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
Kalina Wiatr	34220448	Front Mol Neurosci	WB
Yanzhang Luo	28117408	Sci Rep	WB,IHC

Storage

Storage:

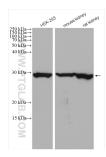
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

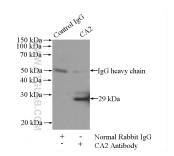
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## 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.