

For Research Use Only

# CA2 Recombinant antibody

Catalog Number: 84954-4-RR



## Basic Information

<b>Catalog Number:</b> 84954-4-RR	<b>GenBank Accession Number:</b> BC011949	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 760	<b>CloneNo.:</b> 242559B4
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P00918	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> carbonic anhydrase II	
<b>Immunogen Catalog Number:</b> AG10680	<b>Calculated MW:</b> 260 aa, 29 kDa	
	<b>Observed MW:</b> 29 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : A431 cells, HEK-293 cells, mouse kidney tissue, rat kidney tissue, mouse ovary tissue
<b>Species Specificity:</b> human, mouse, rat	

## Background Information

CA2(carbonic anhydrase II ) is also called Car2, CA-II, and 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(PMID:16475831). It also may be involved in brain development (PMID:16825953). Defects in CA2 cause osteopetrosis autosomal recessive type 3 (OPTB3).

## Storage

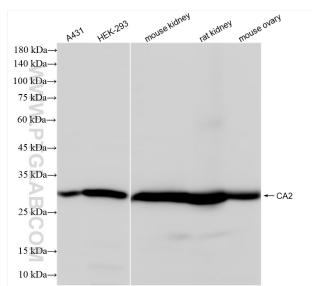
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

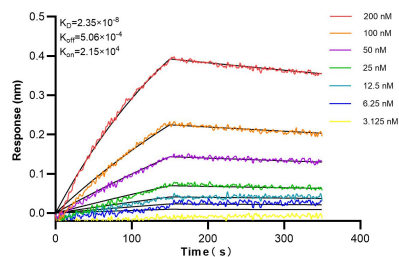
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84954-4-RR (CA2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 84954-4-RR against Human CA2 were performed. The affinity constant is 23.5 nM.