

## Product datasheet for **R1068HRPS**

### Carbonic Anhydrase II (CA2) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/250-1/1,000. <b>ELISA:</b> 1/500-1/2,500. This product has been assayed against 1.0 µg of Carbonic anhydrase 2 [human erythrocytes] in a standard capture ELISA using ABTS as a substrate for 30 minutes at room temperature. A working dilution of 1/1,000 to 1/6,000 of the reconstitution concentration is suggested.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Carbonic anhydrase 2 from human erythrocytes
Specificity:	<b>Immunochemistry:</b> Paraffin (FFPE) or Frozen sections; 1/100 suggested to begin. This antibody detects human Carbonic anhydrase 2. Cross reactivity against Carbonic anhydrase 2 from other tissues and species may occur but have not been specifically determined. Immunoelectrophoresis give a single precipitin arc against anti-peroxidase, anti-rabbit serum as well as purified and partially purified Carbonic anhydrase 2 [human erythrocytes].
Formulation:	0.02M Potassium phosphate, 0.15M Sodium chloride, pH 7.2 Label: HRP State: Purified State: Lyophilized Ig fraction Stabilizer: 10 mg/ml BSA (immunoglobulin and protease free) Preservative: 0.01% (w/v) Gentamicin sulfate (Do NOT add Sodium azide!) Label: Horseradish peroxidase
Reconstitution Method:	Restore with 0.1 ml of deionized water (or equivalent).
Concentration:	lot specific
Purification:	Delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer
Conjugation:	HRP



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<b>Storage:</b>	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Gene Name:</b>	carbonic anhydrase 2
<b>Database Link:</b>	<a href="#">Entrez Gene 760 Human P00918</a>
<b>Background:</b>	Carbonic anhydrase II (CAII) is a single polypeptide chain of molecular weight 29kDa. It is present in the cytosol of most tissues, but highest concentrations are found, like Carbonic Anhydrase I, in erythrocytes. The concentration in erythrocytes is about 20μM. It catalyses the hydration of CO <sub>2</sub> and the hydrolysis of esters. Zn <sup>2+</sup> ion cofactor is required for enzyme activity. Certain point mutations occur without apparent clinical effect, however, complete absence leads to mild mental retardation and cerebral calcification, osteoporosis and renal tubular acidosis.
<b>Synonyms:</b>	Carbonic anhydrase II, Carbonate dehydratase II, Carbonic anhydrase C, CA2, CA-II, CAC