

**R1067HRPS****Polyclonal Antibody to Carbonic anhydrase 1 - HRP**

<b>Alternate names:</b>	CA-I, CA1, CAB, Carbonate dehydratase I, Carbonic anhydrase B, Carbonic anhydrase I
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml (by UV absorbance at 280 nm)
<b>Background:</b>	Carbonic Anhydrase I (CAI) is a single polypeptide chain metalloenzyme of molecular weight 29 kDa. It is present mainly in erythrocytes at a concentration of about 12 mg per gram haemoglobin. Its main enzyme function is to catalyse the reversible hydration of carbon dioxide. It also catalyses the hydrolysis of certain esters. The twelve active CA isozymes are thought to regulate a variety of cellular functions including several processes in the reproductive systems. A mutational deficiency has been described but patients exhibit no adverse chemical symptoms. Red cell CAI levels are decreased in patients with thyrotoxicosis.
<b>Uniprot ID:</b>	<a href="#">P00915</a>
<b>NCBI:</b>	<a href="#">NP_001122301.1</a>
<b>GeneID:</b>	<a href="#">759</a>
<b>Host:</b>	Goat
<b>Immunogen:</b>	Carbonic Anhydrase I from Human erythrocytes
<b>Format:</b>	<b>State:</b> Lyophilized purified Ig fraction <b>Purification:</b> Delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer <b>Buffer System:</b> 0.02 M Potassium phosphate, 0.15 M Sodium chloride, pH 7.2 <b>Preservatives:</b> 0.01% (w/v) Gentamicin sulfate (Do NOT add Sodium azide!) <b>Stabilizers:</b> 10 mg/ml BSA (immunoglobulin and protease free) <b>Label:</b> HRP – Horseradish peroxidase <b>Reconstitution:</b> Restore with 0.1 ml of deionized water (or equivalent).
<b>Applications:</b>	<b>Western blot:</b> 1/1,000-1/5,000. <b>Immunohistochemistry:</b> 1/500-1/2,500. <b>ELISA:</b> 1/5,000-1/20,000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This product detects human Carbonic anhydrase I. Cross reactivity against Carbonic anhydrase I from other tissues and species may occur but have not been specifically determined. Immuno-electrophoresis give a single precipitin arc against anti-peroxidase, anti-goat serum as well as purified and partially purified Carbonic anhydrase I [Human Erythrocytes].

- Storage:** 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.  
Shelf life: one year from despatch.
- Caution:** Do NOT add Sodium azide!