

## Recombinant Carbonic Anhydrase II/Car2 Monoclonal Antibody

catalog number: **AN300544P**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

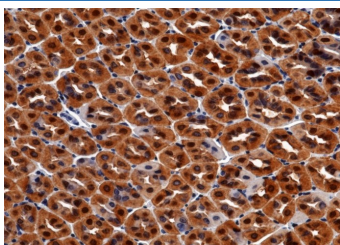
### Description

<b>Reactivity</b>	Mouse
<b>Immunogen</b>	Recombinant Mouse Carbonic Anhydrase II/CA2 protein
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Clone</b>	4F4
<b>Purification</b>	Protein A
<b>Buffer</b>	0.2 µm filtered solution in PBS

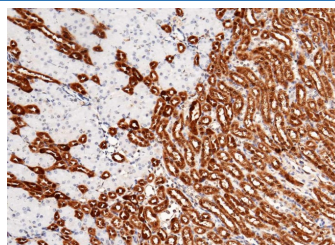
### Applications Recommended Dilution

<b>IHC-P</b>	1:100-1:500
--------------	-------------

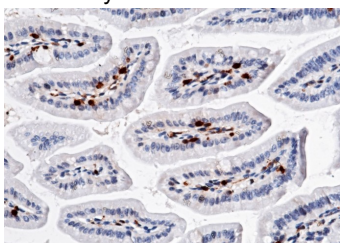
### Data



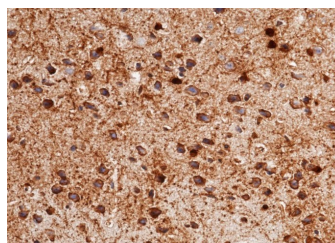
Immunohistochemistry of paraffin-embedded mouse stomach using Carbonic Anhydrase II/Car2 Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded mouse kidney using Carbonic Anhydrase II/Car2 Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded mouse intestine using Carbonic Anhydrase II/Car2 Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded mouse brain using Carbonic Anhydrase II/Car2 Monoclonal Antibody at dilution of 1:200.

### Preparation & Storage

<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Shipping</b>	Ice bag

### Background

#### For Research Use Only

The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. The carbonic anhydrase I (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase II is one of fourteen forms of human  $\alpha$  carbonic anhydrases. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Renal carbonic anhydrase allows the reabsorption of sodium ions in the proximal tubule. Carbonic anhydrase II has been shown to interact with Band 3 and Sodium-hydrogen antiporter 1.