10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Carbonic anhydrase 2 Antibody

Rabbit mAb
Catalog # AP91406

## Product Information

| | |
|---|---|
| **Application** | WB, IHC |
| **Primary Accession** | P00918 |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Other Names** | Carbonic anhydrase 2; Carbonate dehydratase II; Carbonic anhydrase C; CAC; Carbonic anhydrase II; CA-II; CA2; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 29246 |

## Additional Information

| | |
|---|---|
| **Dilution** | WB 1:500~1:2000 IHC 1:50~1:200 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human Carbonic anhydrase 2 |
| **Description** | Essential for bone resorption and osteoclast differentiation (By similarity). Reversible hydration of carbon dioxide. Can hydrates cyanamide to urea. Involved in the regulation of fluid secretion into the anterior chamber of the eye. |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

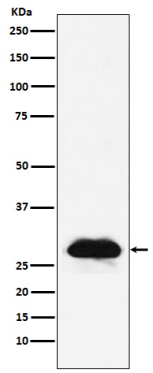
| | |
|---|---|
| **Name** | CA2 |
| **Function** | Catalyzes the reversible hydration of carbon dioxide (PubMed: 11327835, PubMed:11802772, PubMed:11831900, PubMed:12056894, PubMed:12171926, PubMed:1336460, PubMed:14736236, PubMed:15300855, PubMed:15453828, PubMed:15667203, PubMed:15865431, PubMed:16106378, PubMed:16214338, PubMed:16290146, PubMed:16686544, PubMed:16759856, PubMed:16807956, PubMed:17127057, PubMed:17251017, PubMed:17314045, PubMed:17330962, PubMed:17346964, PubMed:17540563, PubMed:17588751, PubMed:17705204, PubMed:18024029, PubMed:18162396, PubMed:18266323, PubMed:18374572, PubMed:18481843, PubMed:18640037, PubMed:18942852, PubMed:1909891, PubMed:1910042, PubMed:19170619, PubMed:19186056, PubMed:19206230, PubMed:19520834, PubMed:19778001, PubMed:7761440, PubMed:7901850, PubMed:8218160, PubMed:8262987, PubMed:8399159, PubMed:8451242, |

PubMed:8485129, PubMed:8639494, PubMed:9265618, PubMed:9398308, PubMed:4994926). Can also hydrate cyanamide to urea (PubMed:10550681, PubMed:11015219). Stimulates the chloride-bicarbonate exchange activity of SLC26A6 (PubMed:15990874). Essential for bone resorption and osteoclast differentiation (PubMed:15300855). Involved in the regulation of fluid secretion into the anterior chamber of the eye. Contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption.

**Cellular Location**

Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

## Images




Western blot analysis of Carbonic anhydrase 2 expression in A431 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.