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KD-Validated Anti-Carbonic anhydrase II Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1195

Specification

KD-Validated Anti-Carbonic anhydrase II Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P00918
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 29 kDa , observed, 29 kDa KDa**
Gene Name	**CA2**
Aliases	**CA2; Carbonic Anhydrase 2; CA-II; Carbonic Anhydrase II; CAII; Carbonate Dehydratase II; Cyanamide Hydratase CA2; Carbonic Anhydrase C; EC 4.2.1.1; Car2; CAC; Epididymis Secretory Protein Li 282; Epididymis Luminal Protein 76; Carbonic Anhydrase B; Carbonic Dehydratase; EC 4.2.1.69; HEL-S-282; HEL-76; CAR2**
Immunogen	**A synthesized peptide derived from human Carbonic anhydrase 2**

KD-Validated Anti-Carbonic anhydrase II Rabbit Monoclonal Antibody - Additional Information

Gene ID	**760**

Other Names
Carbonic anhydrase 2, 4.2.1.1, Carbonate dehydratase II, Carbonic anhydrase C, CAC, Carbonic anhydrase II, CA-II, Cyanamide hydratase CA2, 4.2.1.69, CA2

KD-Validated Anti-Carbonic anhydrase II Rabbit Monoclonal Antibody - 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:<a

href="http://www.uniprot.org/citations/15453828" target="_blank">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:18618712, 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). 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

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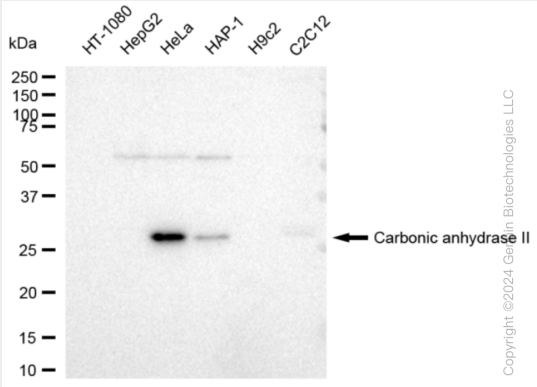
KD-Validated Anti-Carbonic anhydrase II Rabbit Monoclonal Antibody - Protocols

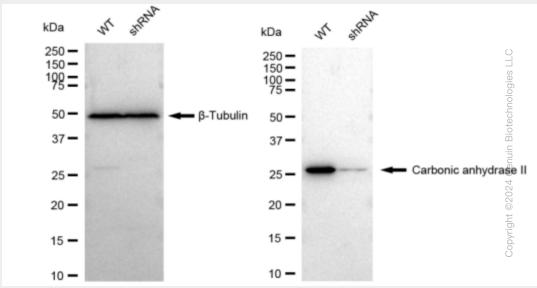
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Carbonic anhydrase II Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Carbonic anhydrase II antibody (Cat#AGI1195). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Carbonic anhydrase II antibody (Cat#AGI1195, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Carbonic anhydrase II antibody (Cat#AGI1195). Carbonic anhydrase II expression in wild type (WT) and Carbonic anhydrase II shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Carbonic anhydrase II antibody (Cat#AGI1195, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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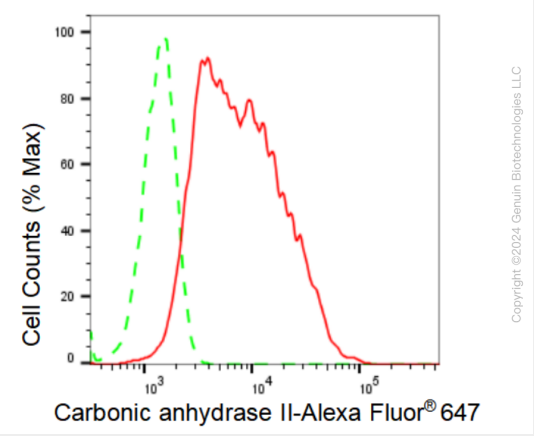
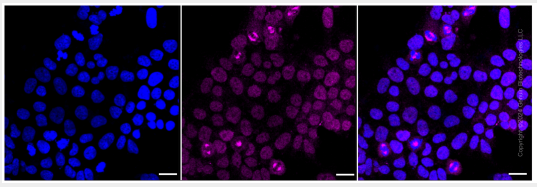


Flow cytometric analysis of Carbonic anhydrase II expression in HeLa cells using Carbonic anhydrase II antibody (Cat#AGI1195, 1:2,000). Green, isotype control; red, Carbonic anhydrase II.



Immunocytochemical staining of Hela cells with Carbonic anhydrase II antibody (Cat#AGI1195, 1:1,000). Nuclei were stained blue with DAPI; Carbonic anhydrase II was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.