

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:>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

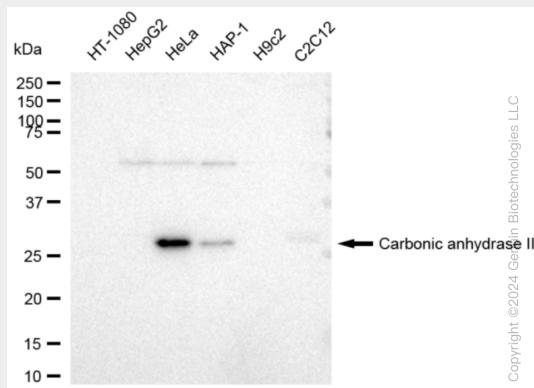
Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

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

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

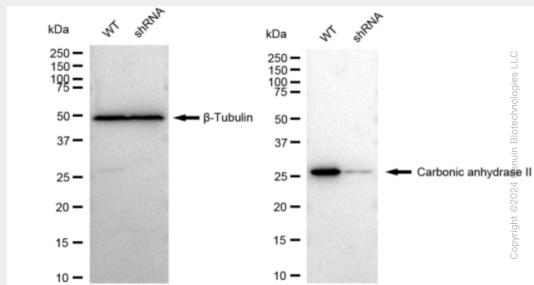
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



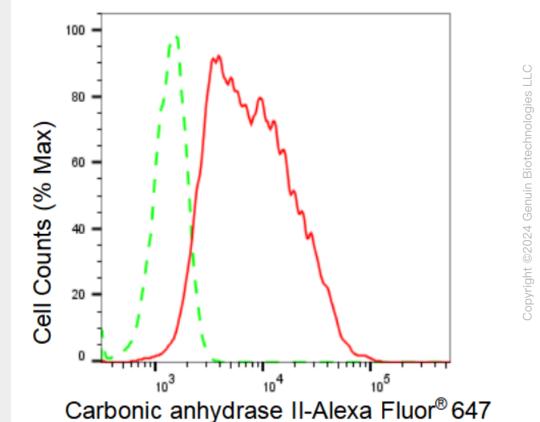
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Western blotting analysis using anti-Carbonic anhydrase II antibody (Cat#AGI1195). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Carbonic anhydrase II antibody (Cat#AGI1195,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



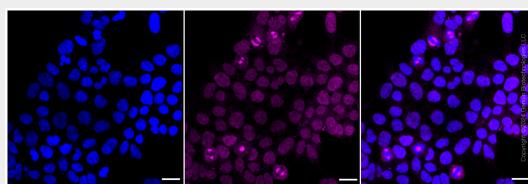
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Western blotting analysis using anti-Carbonic anhydrase II antibody (Cat#AGI1195). Carbonic anhydrase II expression in wild type (WT) and Carbonic anhydrase II shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a 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 anhydride II expression in HeLa cells using Carbonic anhydride II antibody (Cat#AGI1195, 1:2,000). Green, isotype control; red, Carbonic anhydride II.



Immunocytochemical staining of Hela cells with Carbonic anhydride II antibody (Cat#AGI1195, 1:1,000). Nuclei were stained blue with DAPI; Carbonic anhydride 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 μ m.