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

Anti-CA1 Picoband Antibody

Catalog # ABO12216

Product Information

Application	WB, IHC-P
Primary Accession	P00915
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Carbonic anhydrase 1(CA1) detection. Tested with WB, IHC-P in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	759
Other Names	Carbonic anhydrase 1, 4.2.1.1, Carbonate dehydratase I, Carbonic anhydrase B, CAB, Carbonic anhydrase I, CA-I, CA1
Calculated MW	28870
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Cytoplasm.
Source	Eukaryota
Protein Name	Carbonic anhydrase 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human CA1 recombinant protein (Position: D9-F261). Human CA1 shares 78.5% and 81% amino acid (aa) sequence identity with mouse and rat CA1, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	CA1
Function	Catalyzes the reversible hydration of carbon dioxide (PubMed: 10550681, PubMed:16506782, PubMed:16686544, PubMed:16807956, PubMed:17127057, PubMed:17314045, PubMed:17407288, PubMed:19186056, PubMed:19206230, PubMed:4994926). Can hydrate cyanamide to urea (PubMed:10550681).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:B0BNN3}.

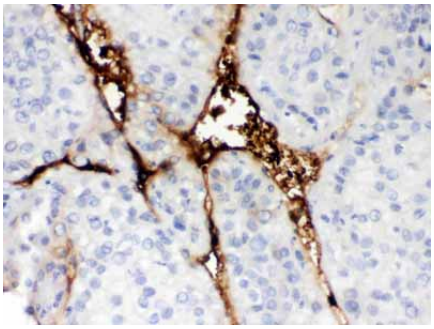
Background

Carbonic anhydrase 1 is an enzyme that in humans is encoded by the CA1 gene. It is a member of the Carbonic anhydrase. The CA1 gene is mapped to 8q22. CAI has got about 260 amino acids. This protein is highly expressed in erythrocytes. As catalysts of the reversible hydration of carbon dioxide, CAI participates in a variety of biologic processes like respiration, calcification, acid-base balance etc.

Images



Anti-CA1 Picoband antibody, ABO12216, Western blottingAll lanes: Anti CA1 (ABO12216) at 0.5ug/mlLane 1: Rat Spleen Tissue Lysate at 50ugLane 2: Rat Liver Tissue Lysate at 50ugLane 3: Rat Kidney Tissue Lysate at 50ugLane 4: Human Placenta Tissue Lysate at 50ugPredicted bind size: 29KDObserved bind size: 29KD



Anti-CA1 Picoband antibody, ABO12216, IHC(P)IHC(P): Human Liver Cancer Tissue

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