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Anti-Carbonic Anhydrase 1 Antibody

Catalog # AP51028

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P00915
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28870

Additional Information

Gene ID	759
Other Names	Carbonic anhydrase 1; Carbonate dehydratase I; Carbonic anhydrase B; CAB; Carbonic anhydrase I; CA-I
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Carbonic Anhydrase 1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

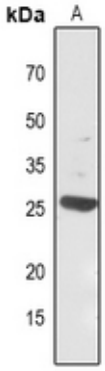
Name	CA1
Function	Catalyzes the reversible hydration of carbon dioxide (PubMed: 10550681, PubMed:16506782, PubMed:16686544, PubMed:16807956, PubMed:17127057, PubMed:17314045, PubMed:17407288, PubMed:19186056, PubMed:19206230, PubMed:4994926). Can hydrate cyanamide to urea (PubMed:10550681).
Cellular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

References

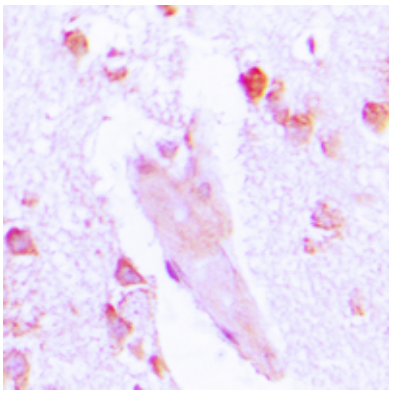
Barlow J.H.,et al.Nucleic Acids Res. 15:2386-2386(1987).
Lowe N.,et al.Gene 93:277-283(1990).
Giraud N.,et al.Biochimie 56:1031-1043(1974).

Andersson B.,et al.Biochem. Biophys. Res. Commun. 48:670-677(1972).
Lin K.-T.D.,et al.J. Biol. Chem. 248:1885-1893(1973).

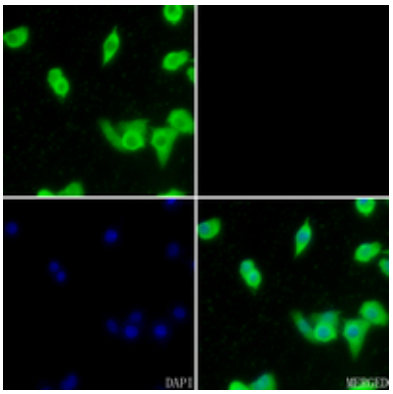
Images



Western blot analysis of Carbonic Anhydrase 1 expression in rat spleen (A) whole cell lysates. (Predicted band size: 28 kD; Observed band size: 28 kD)



Immunohistochemical analysis of Carbonic Anhydrase 1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Carbonic Anhydrase 1 staining in C6 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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