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Anti-Carbonic Anhydrase 4 Antibody

Catalog # AP61035

Product Information

Application	WB, IF/IC
Primary Accession	P22748
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35032

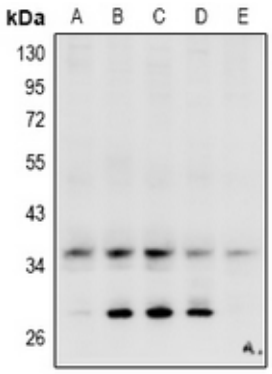
Additional Information

Gene ID	762
Other Names	Carbonic anhydrase 4; Carbonate dehydratase IV; Carbonic anhydrase IV; CA-IV
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Carbonic Anhydrase 4. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) 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

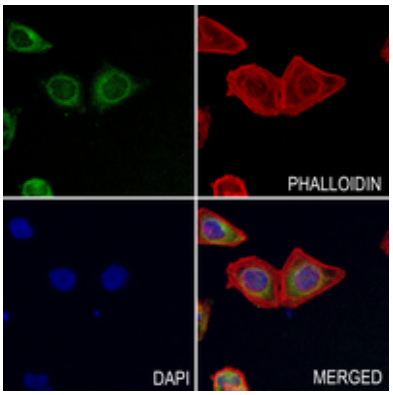
Protein Information

Name	CA4 (HGNC:1375)
Function	Catalyzes the reversible hydration of carbon dioxide into bicarbonate and protons and thus is essential to maintaining intracellular and extracellular pH (PubMed:15563508, PubMed:16686544, PubMed:16807956, PubMed:17127057, PubMed:17314045, PubMed:17652713, PubMed:17705204, PubMed:19186056, PubMed:19206230, PubMed:7625839, PubMed:9054574). May stimulate the sodium/bicarbonate transporter activity of SLC4A4 that acts in pH homeostasis (PubMed:15563508). It is essential for acid overload removal from the retina and retina epithelium, and acid release in the choriocapillaris in the choroid (PubMed:15563508).
Cellular Location	Cell membrane; Lipid-anchor, GPI-anchor
Tissue Location	Expressed in the endothelium of the choriocapillaris in eyes (at protein level). Not expressed in the retinal epithelium at detectable levels.

Images



Western blot analysis of Carbonic Anhydrase 4 expression in HEK293T (A), HepG2 (B), LO2 (C), AML12 (D), PC12 (E) whole cell lysates. (Predicted band size: 35 kD; Observed band size: 35 kD)



Immunofluorescent analysis of Carbonic Anhydrase 4 staining in MCF7 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'.