

ARG54834 anti-CA2 / Carbonic Anhydrase 2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CA2 / Carbonic Anhydrase 2
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CA2 / Carbonic Anhydrase 2
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 54-83 (N-terminus) of Human CA2.
Conjugation	Un-conjugated
Alternate Names	Carbonic anhydrase C; EC 4.2.1.1; Car2; Carbonate dehydratase II; CA-II; Carbonic anhydrase II; CAC; HEL-76; Carbonic anhydrase 2; CAII

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:10 - 1:50
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse kidney	

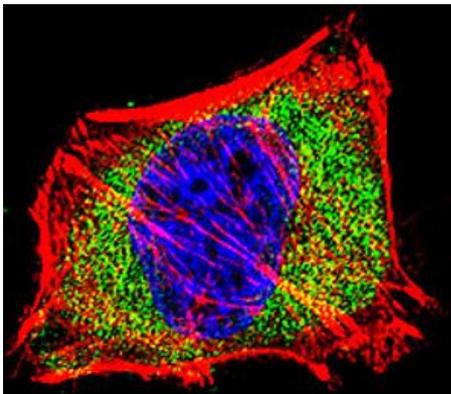
Properties

Form	Liquid
Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

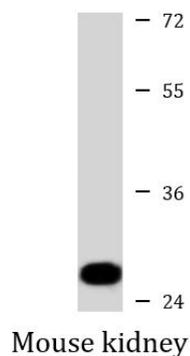
Database links	GeneID: 760 Human Swiss-port # P00918 Human
Gene Symbol	CA2
Gene Full Name	carbonic anhydrase II
Background	The protein encoded by this gene is one of several isozymes of carbonic anhydrase, which catalyzes reversible hydration of carbon dioxide. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2014]
Function	Essential for bone resorption and osteoclast differentiation (By similarity). Reversible hydration of carbon dioxide. Can hydrate cyanamide to urea. 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. Stimulates the chloride-bicarbonate exchange activity of SLC26A6. [UniProt]
Research Area	Cell Biology and Cellular Response antibody
Calculated Mw	29 kDa
Cellular Localization	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

Images



ARG54834 anti-CA2 / Carbonic Anhydrase 2 antibody ICC/IF image

Immunofluorescence: HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then stained with ARG54834 anti-CA2 / Carbonic Anhydrase 2 antibody (green) at 1:25 dilution, 1 h at 37°C. Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min).



ARG54834 anti-CA2 / Carbonic Anhydrase 2 antibody WB image

Western blot: 35 µg of Mouse kidney lysate stained with ARG54834 anti-CA2 / Carbonic Anhydrase 2 antibody at 1:1000 dilution.