

ARG42100 anti-CA12 / Carbonic Anhydrase 12 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes CA12 / Carbonic Anhydrase 12
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Specificity	This antibody is expected to recognize all reported isoforms (NP_001209.1; NP_996808.1; NP_001280571.1).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	CA12 / Carbonic Anhydrase 12
Species	Human
Immunogen	Synthetic peptide around the internal region of Human CA12. (C-SHLQHVKYKGQE) (NP_001209.1; NP_996808.1; NP_001280571.1)
Conjugation	Un-conjugated
Alternate Names	Carbonic anhydrase 12; Tumor antigen HOM-RCC-3.1.3; EC 4.2.1.1; HsT18816; Carbonic anhydrase XII; CAXII; CA-XII; Carbonate dehydratase XII

Application Instructions

Application table	Application	Dilution
	IHC-P	5 - 10 µg/ml
	WB	0.3 - 1 µg/ml
Application Note	WB: Recommend incubate at RT for 1h. IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human kidney	
Observed Size	~ 40 kDa	

Properties

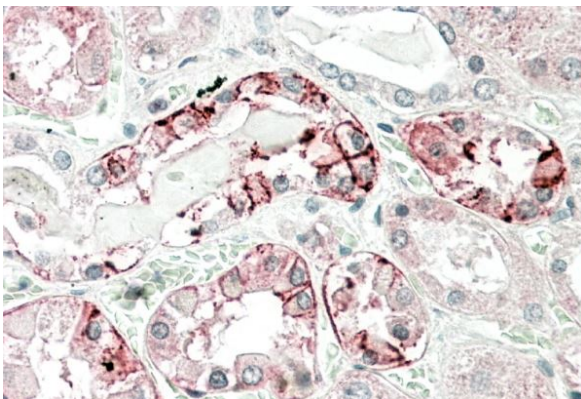
Form	Liquid
Purification	Affinity purified
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA

Concentration	0.5 mg/ml
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

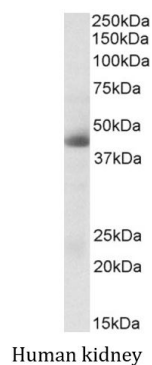
Gene Symbol	CA12
Gene Full Name	carbonic anhydrase XII
Background	Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Three transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2014]
Function	Reversible hydration of carbon dioxide. [UniProt]
Calculated Mw	39 kDa
Cellular Localization	Membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG42100 anti-CA12 / Carbonic Anhydrase 12 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human kidney tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG42100 anti-CA12 / Carbonic Anhydrase 12 antibody at 5 µg/ml dilution.



ARG42100 anti-CA12 / Carbonic Anhydrase 12 antibody WB image

Western blot: 35 µg of Human kidney lysate (in RIPA buffer) stained with ARG42100 anti-CA12 / Carbonic Anhydrase 12 antibody at 0.3 µg/ml dilution and incubated at RT for 1 hour.