ARG57809
anti-CA9 / Carbonic Anhydrase 9 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CA9 / Carbonic Anhydrase 9
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CA9 / Carbonic Anhydrase 9
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 52-151 of Human CA9 (NP_001207.2).
Conjugation	Un-conjugated
Alternate Names	EC 4.2.1.1; MN; CAIX; pMW1; Carbonic anhydrase 9; Carbonic anhydrase IX; RCC-associated antigen G250; Membrane antigen MN; P54/58N; Carbonate dehydratase IX; Renal cell carcinoma-associated antigen G250; CA-IX

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Mouse small intestine

Properties

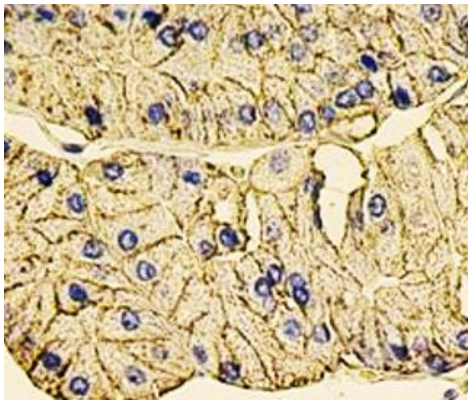
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. 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

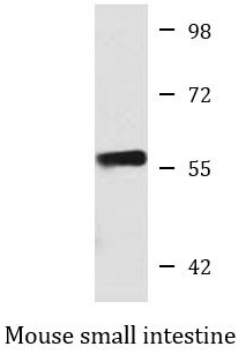
Gene Symbol	CA9
Gene Full Name	carbonic anhydrase IX
Background	Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA IX is a transmembrane protein and is one of only two tumor-associated carbonic anhydrase isoenzymes known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12. [provided by RefSeq, Jun 2014]
Function	Reversible hydration of carbon dioxide. Participates in pH regulation. May be involved in the control of cell proliferation and transformation. Appears to be a novel specific biomarker for a cervical neoplasia. [UniProt]
Highlight	Related products: Carbonic Anhydrase9 antibodies; Carbonic Anhydrase9 ELISA Kits; Anti-Rabbit IgG secondary antibodies; Related news: Hypoxia-induced transcription, histone demethylases are involved
Calculated Mw	50 kDa
PTM	Asn-346 bears high-mannose type glycan structures. [UniProt]
Cellular Localization	Cell membrane, Cell projection, Nucleus, Single-pass type I membrane protein, microvillus membrane, nucleolus. [UniProt]

Images



ARG57809 anti-CA9 / Carbonic Anhydrase 9 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach stained with ARG57809 anti-CA9 / Carbonic Anhydrase 9 antibody at 1:100 dilution.



ARG57809 anti-CA9 / Carbonic Anhydrase 9 antibody WB image

Western blot: 25 µg of Mouse small intestine lysate stained with ARG57809 anti-CA9 / Carbonic Anhydrase 9 antibody at 1:1000 dilution.