

# Product datasheet

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# ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Mouse Monoclonal antibody recognizes CA9 / Carbonic Anhydrase 9

Tested Reactivity Hu

Tested Application FACS, IHC-P, WB

Host Mouse

Clonality Monoclonal

Isotype IgG1

Target Name CA9 / Carbonic Anhydrase 9

Species Human

Immunogen Purified recombinant fragment of Human CA9 expressed in E. coli.

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
	FACS	Assay-dependent
	IHC-P	Assay-dependent
	WB	Assay-dependent
• •	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Ascitic fluid

Buffer Ascitic fluid and 0.03% Sodium azide.

Preservative 0.03% 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

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.

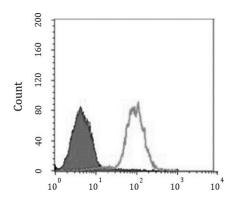
[UniProt]

Calculated Mw 50 kDa

PTM Asn-346 bears high-mannose type glycan structures.

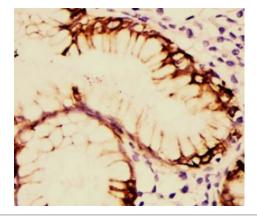
Cellular Localization Cell projection > Microvillus membrane > Single-pass type I membrane protein.

#### **Images**



#### ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody FACS image

Flow Cytometry: NTERA-2 cells stained with ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody (right histogram) and negative control (left histogram).



#### ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach tissue stained with ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody.

# ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody WB image

- 98 - 72 - 55 - 42 - 35 - 25

MCF7

Western blot: MCF7 cell lysate stained with ARG57461 anti-CA9 / Carbonic Anhydrase 9 antibody at 1:5000 dilution.

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