abcam

ab15086

Anti-Carbonic Anhydrase 9/CA9 antibody

Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086) is a rabbit polyclonal antibody detecting Carbonic Anhydrase 9/CA9 in **Western Blot, Flow Cytometry (Intra), IHC-P, IHC-Fr**. Suitable for **Human, Rat**.

- Over 130 publications
- Trusted since 2004

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human CA9 aa 350 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link Q16790
Purification technique	Affinity purification Immunogen
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC

Tested

Species	Human
Dilution info	2-5 µg/mL

Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Rat
Dilution info	-
Notes	-

Species	Human
Dilution info	1 µg/mL
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/500
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-Fr

Tested

Species	Human
Dilution info	1/200 - 1/500
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Expected

Species	Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CA9

Function	Catalyzes the interconversion between carbon dioxide and water and the dissociated ions of carbonic acid (i.e. bicarbonate and hydrogen ions).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086) is a rabbit polyclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr) in Human, Rat samples.

What is the molecular weight of Carbonic Anhydrase 9/CA9?
Anti-Carbonic Anhydrase 9/CA9 (ab15086) specifically detects a band for Carbonic Anhydrase 9/CA9 (UniProt: Q16790) at a molecular weight of 49.7kDa.

Trusted by the scientific community
Anti-Carbonic Anhydrase 9/CA9 (ab15086) was first used in a scientific publication in 2004 and has been cited over 130 times in peer-reviewed journals.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

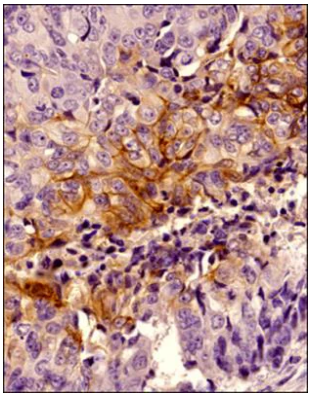
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

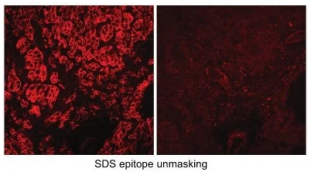
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Carbonic Anhydrase 9/CA9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Carbonic Anhydrase 9/CA9 antibody

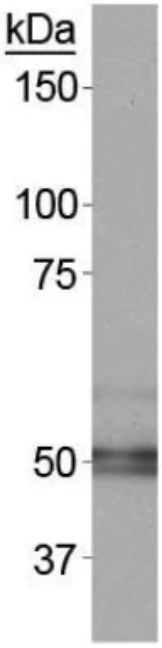
Immunohistochemistry analysis of a formalin-fixed, paraffin-embedded tissue section of human breast cancer using ab15086 at 1:1000 dilution. The primary antibody bound to Carbonic Anydrase 9/CA9 antigens in the tissue section was detected using a HRP labeled secondary antibody and DAB reagent. Nuclei of the cells were counterstained with hematoxylin. This antibody generated an expected cytoplasmic staining of Carbonic Anydrase 9/CA9 protein with an intense signal around the cellular membranes in tumor cores. The latter are more likely to be hypoxic in growing tumors which signifies that the observed Carbonic Anydrase 9/CA9 staining is specific.



Immunohistochemistry (Frozen sections) - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Carbonic Anhydrase 9/CA9 Immunohistochemistry (Frozen sections) staining using rabbit Anti-Carbonic Anhydrase 9/CA9 antibody

Immunohistochemistry analysis of human renal cell cancer tumor cryosections stained with ab15086 at a 1/500 dilution (left) or normal rabbit serum (right).



Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Carbonic Anhydrase 9/CA9 Western blot staining using rabbit Anti-Carbonic Anhydrase 9/CA9 antibody

Western blot analysis labeling Carbonic Anhydrase 9/CA9 with ab15086 at 1 ug/ml in rat renal cortex lysate.
All lanes:
Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Predicted band size: 49 kDa

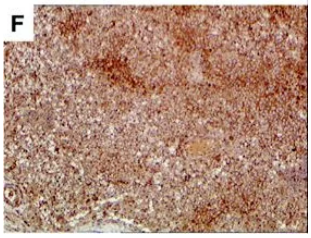


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Immunohistochemistry - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Carbonic Anhydrase 9/CA9 Immunohistochemistry staining using rabbit Anti-Carbonic Anhydrase 9/CA9 antibody

Immunohistochemistry using Anti-Carbonic Anhydrase 9/CA9 antibody, ab15086. Publication image from Zuffardi, O. et al., 2009, Mol Cancer, 19642973. Legend direct from paper.

Immunohistochemical analysis of antigens in dysgerminoma. (A) normal Fallopian tube; (B-H) dysgerminoma. (A) intense TRC8 immunoperoxidase expression in control tissue. (B) negative immunoperoxidase TRC8 reaction in dysgerminoma; C, CD117 strong membrane staining in

dysgerminoma; D, diffuse and intense VHL expression; E, FGFR cytoplasmic expression; F, diffuse and intense CAIX expression; G, HIF2alpha nuclear and cytoplasmic expression in sporadic cells; H, moderate lipid deposition detected by Oil Red O. Original magnification A-H x100.

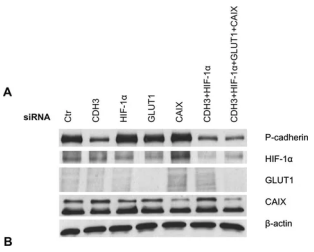


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Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Carbonic Anhydrase 9/CA9 Western blot staining using rabbit Anti-Carbonic Anhydrase 9/CA9 antibody

Carbonic Anhydrase 9/CA9 western blot using anti-Carbonic Anhydrase 9/CA9 antibody ab15086. Publication image and figure legend from Sousa, B., Ribeiro, A. S., et al., 2014, BMC Cancer, PubMed 25269858.

ab15086 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab15086 please see the product overview.

MFE (%) decreases upon siRNA-mediated silencing ofCDH3,HIF-1α, GLUT1andCAIXin SUM149 cells. siRNA-mediated silencing of CDH3, HIF-1α, GLUT1 and CAIX was confirmed by western blot analysis (A). A statistically significant decrease in MFE (%) was observed when we silenced CDH3, HIF-1α, GLUT1 and CAIX. The simultaneous silencing of CDH3 and HIF-1α also revealed a significant decrease of MFE (%) of the target cells, although not cumulative. Still, the silencing of the expression of all transcripts tested led to a non-cumulative inhibition of the MFE compared to the control cells (B). *$p < 0.05$.

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