abcam

Product datasheet

Anti-Carbonic Anhydrase 9/CA9 antibody ab15086

★★★★★ 4 Abreviews 134 References 5 Images

Overview

Product name Anti-Carbonic Anhydrase 9/CA9 antibody

Description Rabbit polyclonal to Carbonic Anhydrase 9/CA9

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), ICC, IHC-Fr, IHC-P, WB

Species reactivity Reacts with: Rat, Human

Immunogen Synthetic peptide corresponding to Human Carbonic Anhydrase 9/CA9 aa 359-459.

Sequence:

LSDTLWGPGDSRLQLNFRATQPLNGRVIEASFPAGVDSS

PRAAEPVQLNS

CLAAGDILALVFGLLFAVTSVAFLVQMRRQHRRGTKGGVS

YRPAEVAETG A

Database link: Q16790

(Peptide available as ab109840)

■ Run BLAST with

■ Run BLAST with

Positive control WB: Ramos, A549, HeLa and MDA-MB-231 cell lysates; Rat renal cortex lysate. Intr Flow Cyt: A-

431 and U-87 MG cells. ICC: A-431 cells. IHC-Fr: Human renal cell cancer tumor sections. IHC-P:

Human breast cancer sections.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

Storage buffer pH: 7.40

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Preservative: 0.1% Sodium azide

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab15086 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/1000.
ICC		Use a concentration of 2 - 5 μg/ml.
IHC-Fr	★★★★☆ (1)	1/200 - 1/500.
IHC-P	**** <u>(2)</u>	1/200 - 1/500.
WB	★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 49.7 kDa).Can be blocked with Recombinant Human RND1 protein (ab109840) .

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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.

Tissue specificity Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues

and the most abundant expression is found in the epithelial cells of gastric mucosa.

Sequence similaritiesBelongs to the alpha-carbonic anhydrase family.

Contains 1 alpha-carbonic anhydrase domain.

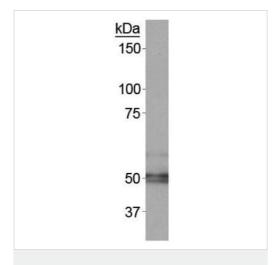
Post-translational modifications

Asn-346 bears high-mannose type glycan structures.

Cellular localization Nucleus. Nucleus, nucleolus. Cell membrane. Cell projection, microvillus membrane. Found on the

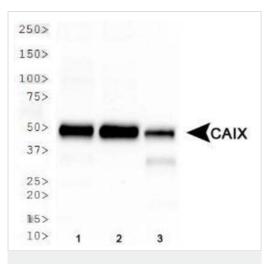
surface microvilli and in the nucleus, particularly in nucleolus.

Images



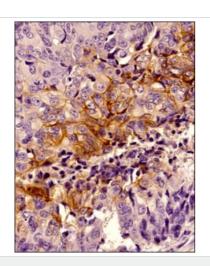
Western blot analysis labeling Carbonic Anhydrase 9/CA9 with ab15086 at 1 ug/ml in rat renal cortex lysate.





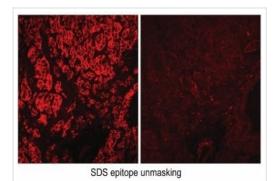
Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086)

Western blot analysis labeling Carbonic Anhydrase 9/CA9 with ab15086 at 1 ug/ml in 1) HeLa, 2) MDA-MB-231, and 3) A549 whole cell lysates.



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

Immunohistochemistry analysis of a formalin-fixed, paraffinembedded 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)

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



All lanes : Anti-Carbonic Anhydrase 9/CA9 antibody (ab15086) at 1 µg/ml

Lane 1 : Ramos (Human Burkitt's lymphoma cell line) Whole Cell Lysate

Lane 2: A549 (Human lung adenocarcinoma epithelial cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 49.7 kDa **Observed band size:** 55 kDa

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