abcam

Product datasheet

Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] ab108351

Recombinant RabMAb

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Overview

Product name	Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)]
Description	Rabbit monoclonal [EPR4151(2)] to Carbonic Anhydrase 9/CA9
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC: Human stomach tissue; WB: HT-29 cells and human stomach lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR4151(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab108351 in the following tested applications.

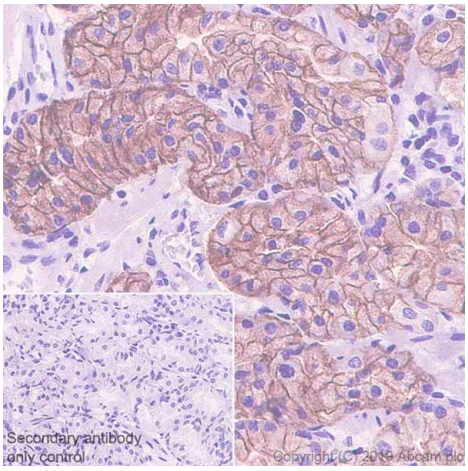
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★☆☆ (3)	1/1000 - 1/10000. Detects a band of approximately 54 kDa (predicted molecular weight: 50 kDa).
IHC-P	★★★★☆ (1)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.

Target

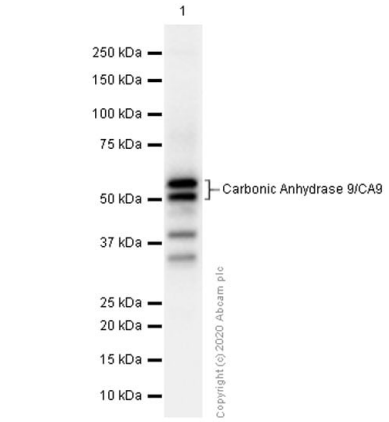
Function	Reversible hydration of carbon dioxide. Participates in pH regulation. May be involved in the control of cell proliferation and transformation. Appears to be a novel specific biomarker for a cervical neoplasia.
Tissue specificity	Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa.
Sequence similarities	Belongs 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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] (ab108351)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human stomach tissue sections labeling Carbonic Anhydrase 9/CA9 with Purified ab108351 at 1:150 dilution (0.89 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] (ab108351)

Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] (ab108351) at 1/10000 dilution (Purified) + HT-29 (Human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

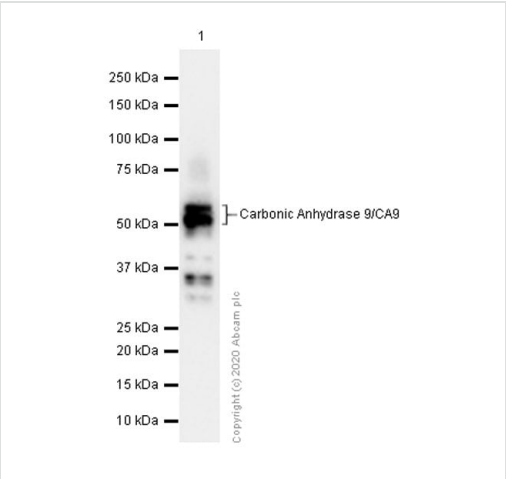
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 50 kDa
Observed band size: 54, 58 kDa

The molecular weight observed is consistent with what has been described in the literature (PMID: 12966427, 30734594 and 15951534).

Blocking Buffer and concentration: 5% NFDM/TBST



Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] (ab108351)

Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] (ab108351) at 1/10000 dilution (Purified) + Human stomach lysate at 20 µg

Secondary

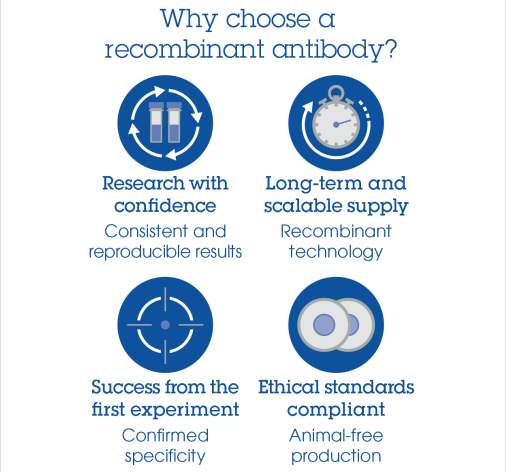
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 50 kDa

Observed band size: 54, 58 kDa

The molecular weight observed is consistent with what has been described in the literature (PMID: 12966427, 30734594 and 15951534).

Blocking Buffer and concentration: 5% NFDM/TBST



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