

Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] - BSA and Azide free ab180539

Recombinant RabMAb

★★★★☆ [1 Abreviews](#) [1 References](#) [4 Images](#)

Overview

Product name	Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] - BSA and Azide free
Description	Rabbit monoclonal [EPR4151(2)] to Carbonic Anhydrase 9/CA9 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Carbonic Anhydrase 9/CA9 aa 200-300 (extracellular). The exact sequence is proprietary. Database link: Q16790
Positive control	IHC: Human stomach tissue; WB: HT-29 cells and human stomach lysate.
General notes	ab180539 is the carrier-free version of ab108351 .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4151(2)
Isotype	IgG

Applications

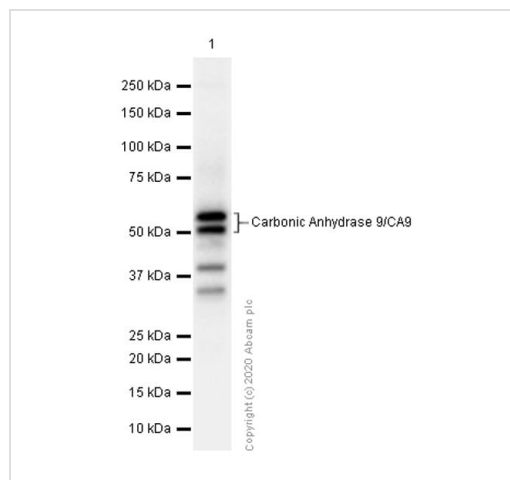
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab180539 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
WB		Use at an assay dependent concentration. Predicted molecular weight: 49 kDa.

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



Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] - BSA and Azide free (ab180539)

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 μ g

Secondary

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

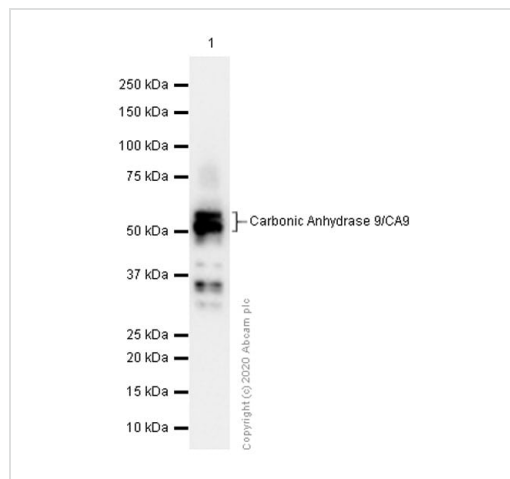
Predicted band size: 49 kDa

Observed band size: 54, 58 kDa

This data was developed using [ab108351](#), the same antibody clone in a different buffer formulation.

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

Blocking Buffer and concentration: 5% NFD/MTBST



Western blot - Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] - BSA and Azide free (ab180539)

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

Secondary

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

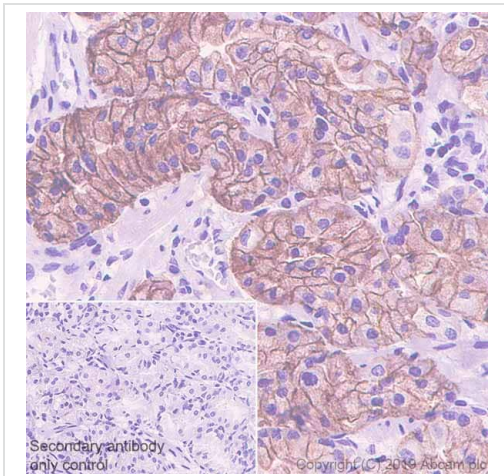
Predicted band size: 49 kDa

Observed band size: 54, 58 kDa

This data was developed using [ab108351](#), the same antibody clone in a different buffer formulation.

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

Blocking Buffer and concentration: 5% NFD/MTBST





This data was developed using ab180539, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human stomach tissue sections labeling Carbonic Anhydrase 9/CA9 with Purified ab180539 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.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] - BSA and Azide free (ab180539)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Carbonic Anhydrase 9/CA9 antibody [EPR4151(2)] - BSA and Azide free (ab180539)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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