

## Product datasheet

# Anti-Carbonic anhydrase 2/CA2 antibody ab231135

[5 Images](#)

### Overview

<b>Product name</b>	Anti-Carbonic anhydrase 2/CA2 antibody
<b>Description</b>	Rabbit polyclonal to Carbonic anhydrase 2/CA2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human, Rhesus monkey
<b>Immunogen</b>	<p>Recombinant full length protein (His-tag) corresponding to Carbonic anhydrase 2/CA2 aa 1-260. (Expressed in E.coli).</p> <p>Sequence:</p> <pre> MSHHWGYGKHNHNGPEHWHKDFPIAKGQRQSPVDIDHTAK YDPSLKPLSVS YDQATSLRILNNGHSFNVEFDDSDKAVIKGGPLDGTYRLI QFHFHWGSL DGQGSEHTVDKKKYAAELHLVHWNTKYGDFGKAVQQPD GLAVLGIFLKVG SAKPGLQKVVDVLDSIKTKGKSADFTNFDPRGLLPESLDY WTYPGSLTTP PLLECVTWVWLKEPISVSSEQMSKFRKLNFNNGEGEPEELM VDNWRPAQPL KNRQIKASFK </pre> <p>Database link: <a href="#">H9FZ12</a></p> <p style="text-align: right;"> <a href="#">Run BLAST with</a>       <a href="#">Run BLAST with</a> </p>
<b>Positive control</b>	WB: Recombinant Rhesus monkey Carbonic anhydrase 2/CA2 protein; Human lung and liver lysates; Monkey and mouse serum.
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p>

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab231135 was purified by antigen-specific affinity chromatography followed by Protein A affinity chromatography.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab231135** 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		Use a concentration of 0.2 - 2 µg/ml. Predicted molecular weight: 29 kDa.

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## Target

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<b>Function</b>	Essential for bone resorption and osteoclast differentiation (By similarity). Reversible hydration of carbon dioxide. Can hydrates cyanamide to urea. Involved in the regulation of fluid secretion into the anterior chamber of the eye.
<b>Involvement in disease</b>	Defects in CA2 are the cause of osteopetrosis autosomal recessive type 3 (OPTB3) [MIM:259730]; also known as osteopetrosis with renal tubular acidosis, carbonic anhydrase II deficiency syndrome, Guibaud-Vaincel syndrome or marble brain disease. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or adulthood. Autosomal recessive osteopetrosis is usually associated with normal or elevated amount of non-functional osteoclasts. OPTB3 is associated with renal tubular acidosis, cerebral

calcification (marble brain disease) and in some cases with mental retardation.

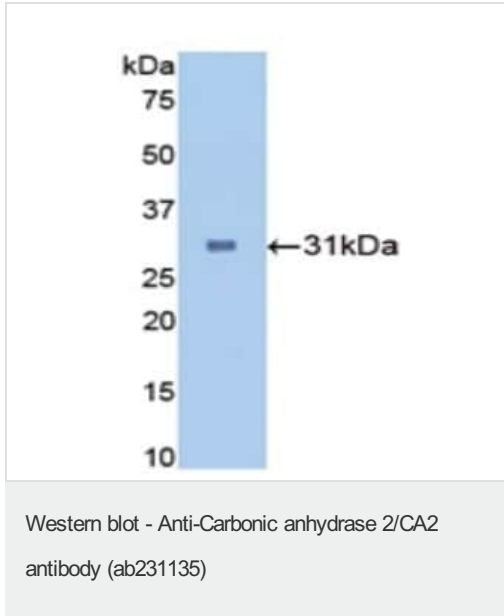
**Sequence similarities**

Belongs to the alpha-carbonic anhydrase family.

**Cellular localization**

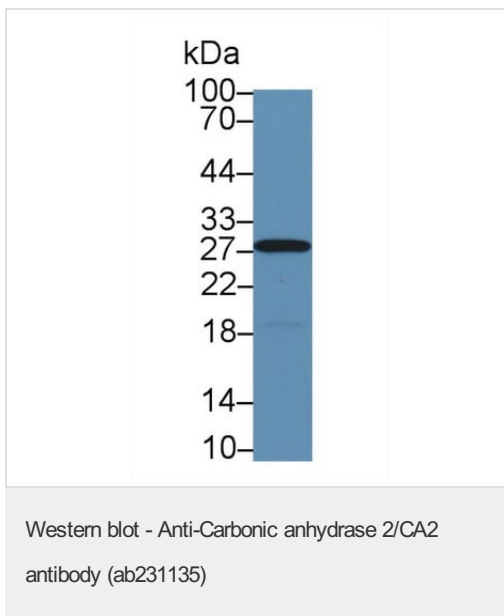
Cytoplasm.

**Images**



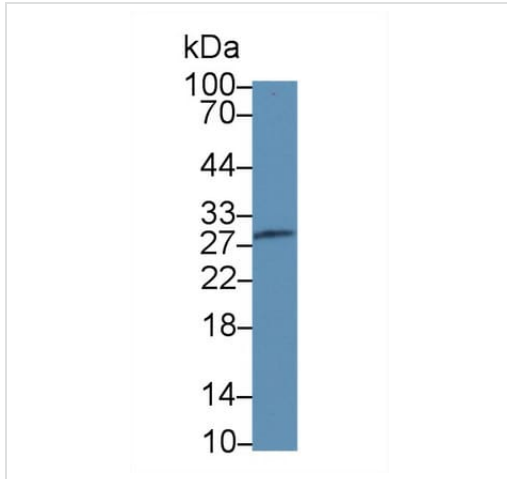
Anti-Carbonic anhydrase 2/CA2 antibody (ab231135) at 5 µg/ml +  
Recombinant Rhesus monkey Carbonic anhydrase 2/CA2 protein

**Predicted band size:** 29 kDa



Anti-Carbonic anhydrase 2/CA2 antibody (ab231135) at 2 µg/ml +  
Human lung lysate

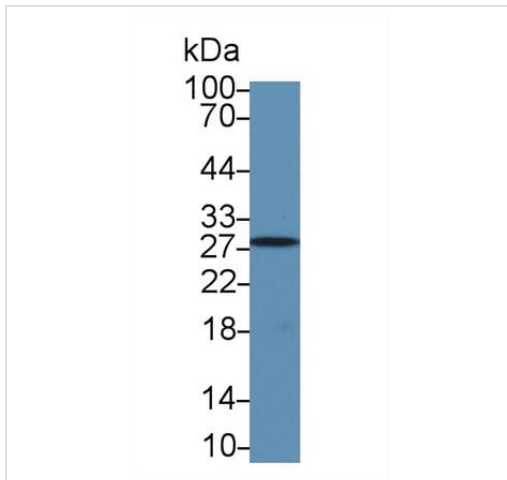
**Predicted band size:** 29 kDa



Anti-Carbonic anhydrase 2/CA2 antibody (ab231135) at 5  $\mu$ g/ml +  
Monkey serum

**Predicted band size:** 29 kDa

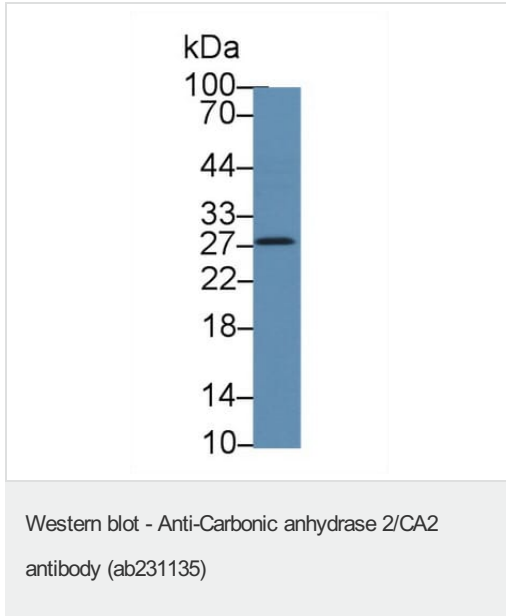
Western blot - Anti-Carbonic anhydrase 2/CA2  
antibody (ab231135)



Anti-Carbonic anhydrase 2/CA2 antibody (ab231135) at 2  $\mu$ g/ml +  
Human liver lysate

**Predicted band size:** 29 kDa

Western blot - Anti-Carbonic anhydrase 2/CA2  
antibody (ab231135)



Anti-Carbonic anhydrase 2/CA2 antibody (ab231135) at 5 µg/ml +  
Mouse serum

**Predicted band size:** 29 kDa

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

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

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