abcam

Product datasheet

Anti-Carbonic anhydrase 2/CA2 antibody ab231153

5 Images

Overview

Product name Anti-Carbonic anhydrase 2/CA2 antibody

Description Rabbit polyclonal to Carbonic anhydrase 2/CA2

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Chicken, Human

Immunogen Recombinant full length protein (His-tag) corresponding to Chicken Carbonic anhydrase 2/CA2

aa 1 to the C-terminus. Expressed in E. coli.

Database link: P07630

Run BLAST with
Run BLAST with

Positive control WB: Recombinant chicken Carbonic anhydrase 2/CA2 protein. HEK-293T cell lysate; Chicken

testis and eye lysate; Chicken serum.

General notes

The 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). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.011% Proclin 300

Constituents: 55.77% Glycerol (glycerin, glycerine), 44.219% PBS

Purity Immunogen affinity purified

Purification notes Antigen-specific affinity chromatography followed by Protein A affinity chromatography

Clonality Polyclonal

Isotype IgG

1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab231153 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.

Target

Function

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.

Involvement in disease

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-Vainsel 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

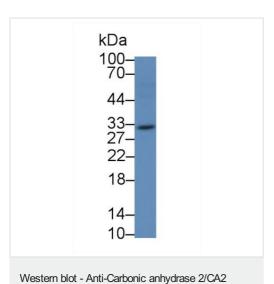
Belongs to the alpha-carbonic anhydrase family.

Cellular localization

antibody (ab231153)

Cytoplasm.

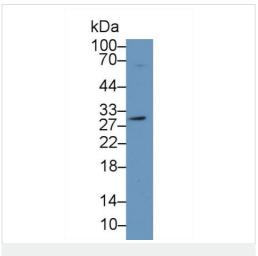
Images



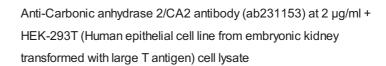
Anti-Carbonic anhydrase 2/CA2 antibody (ab231153) at 2 μ g/ml + Chicken serum

Predicted band size: 29 kDa

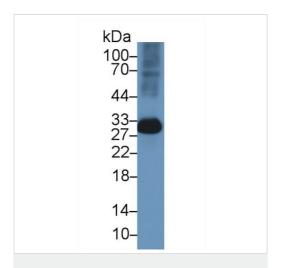
2



Western blot - Anti-Carbonic anhydrase 2/CA2 antibody (ab231153)



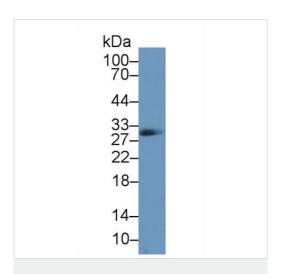
Predicted band size: 29 kDa



Western blot - Anti-Carbonic anhydrase 2/CA2 antibody (ab231153)

Anti-Carbonic anhydrase 2/CA2 antibody (ab231153) at 1 μ g/ml + Chicken eye lysate

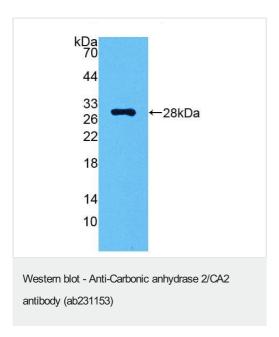
Predicted band size: 29 kDa



Western blot - Anti-Carbonic anhydrase 2/CA2 antibody (ab231153)

Anti-Carbonic anhydrase 2/CA2 antibody (ab231153) at 2 μ g/ml + Chicken testis lysate

Predicted band size: 29 kDa



Anti-Carbonic anhydrase 2/CA2 antibody (ab231153) at 2 µg/ml + Recombinant chicken Carbonic anhydrase 2 protein

Predicted band size: 29 kDa

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors