abcam

Product datasheet

HRP Anti-Carbonic anhydrase 2/CA2 antibody ab34586

Overview

Product name	HRP Anti-Carbonic anhydrase 2/CA2 antibody
Description	HRP Rabbit polyclonal to Carbonic anhydrase 2/CA2
Host species	Rabbit
Conjugation	HRP
Tested applications	**Suitable for:** ELISA, Dot blot
Species reactivity	**Reacts with:** Cow
Immunogen	Full length native protein (purified) corresponding to Cow Carbonic anhydrase 2/CA2.
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.
Storage buffer	pH: 6.50 Preservative: 0.01% Gentamicin sulphate Constituents: 1% BSA, 0.42% Tripotassium orthophosphate, 0.87% Sodium chloride
Purity	IgG fraction
Purification notes	Purified by delipidation, salt fractionation and ion exchange chromatography.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee	Our **Abpromise guarantee** covers the use of ab34586 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
ELISA		1/5000 - 1/20000.
Dot blot		Use at an assay dependent concentration.

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	Cytoplasm.

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- 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.

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