Anti-Carbonic Anhydrase II antibody ab191343

Overview

Product name: Anti-Carbonic Anhydrase II antibody
Description: Rabbit polyclonal to Carbonic Anhydrase II
Host species: Rabbit
Tested applications: Suitable for: WB, ELISA, IHC-P, IHC-Fr, ICC/IF
Species reactivity: Reacts with: Mouse, Human
Positive control: WB: carbonic Anhydrase II IHC-P: Mouse eye tissue; Human kidney tissue.
General notes: This product is the 100 µg version of ab6621.

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer: pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride
Purity: IgG fraction
Purification notes: This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis.
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab191343 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>1/2000 - 1/10000.</td>
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</table>
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.

Images

Anti-Carbonic Anhydrase II antibody (ab191343) at 1/1000 dilution
+ Carbonic Anhydrase II at 0.05 µg

Secondary

Rabbit Peroxidase at 1/40000 dilution
Formalin-fixed, paraffin-embedded human kidney tissue stained for Carbonic Anhydrase II using ab191343 at 4 μg/ml in immunohistochemical analysis.

Formalin-fixed, paraffin-embedded mouse eye tissue stained for Carbonic Anhydrase II using ab191343 at 4 μg/ml in immunohistochemical analysis.

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

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