

Anti-CA IV Picoband Antibody
 Catalog # ABO10191

Specification

Anti-CA IV Picoband Antibody - Product Information

Application **WB**
 Primary Accession [P22748](#)
 Host **Rabbit**
 Reactivity **Human, Mouse, Rat**
 Clonality **Polyclonal**
 Format **Lyophilized**

Description

Rabbit IgG polyclonal antibody for Carbonic anhydrase 4(CA4) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CA IV Picoband Antibody - Additional Information

Gene ID 762

Other Names

Carbonic anhydrase 4, 4.2.1.1, Carbonate dehydratase IV, Carbonic anhydrase IV, CA-IV, CA4

Calculated MW

35032 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization

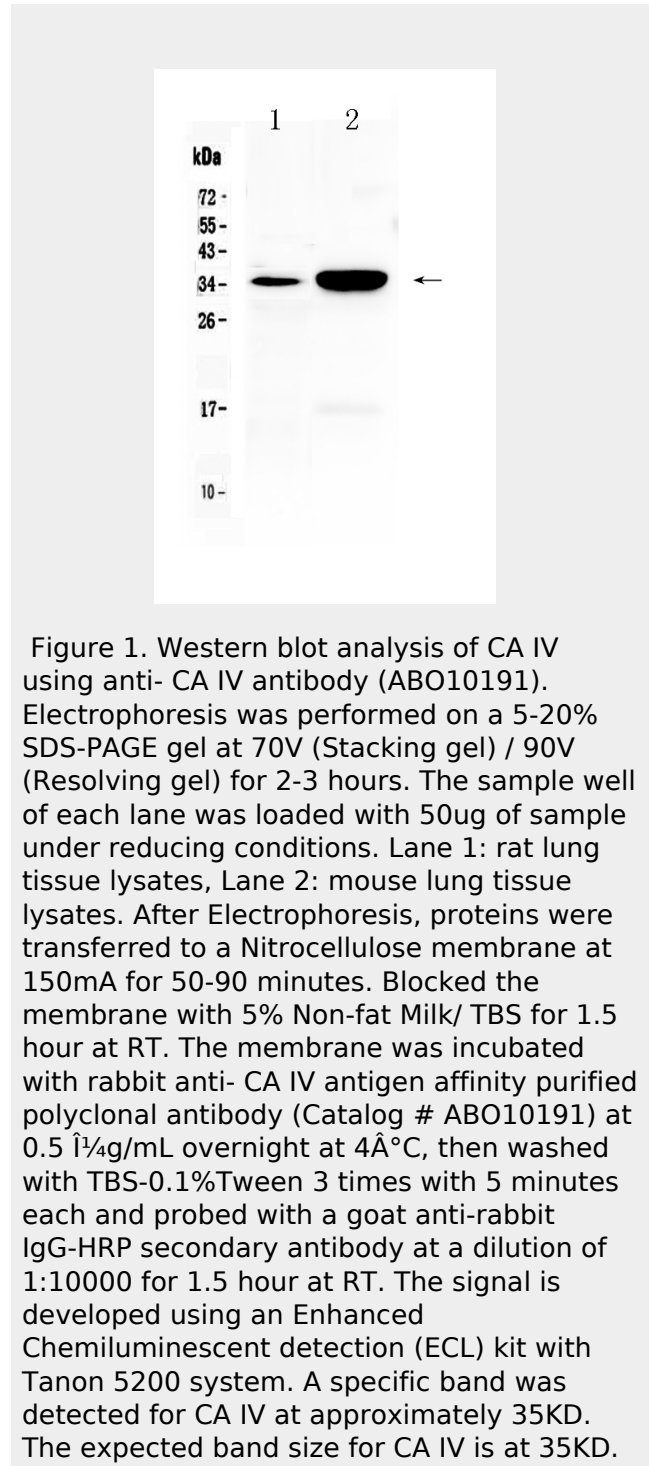
Cell membrane; Lipid-anchor, GPI-anchor.

Tissue Specificity

Expressed in the endothelium of the choriocapillaris in eyes (at protein level). Not expressed in the retinal epithelium at detectable levels. .

Protein Name

Carbonic anhydrase 4



Anti-CA IV Picoband Antibody - Background

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E.coli-derived human CA IV recombinant protein (Position: A19-S284). Human CA IV shares 55.5% and 58.9% amino acid (aa) sequence identity with mouse and rat CA IV, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Carbonic anhydrase 4 is an enzyme that in humans is encoded by the CA4 gene. Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. This gene encodes a glycosylphosphatidyl-inositol-anchored membrane isozyme expressed on the luminal surfaces of pulmonary (and certain other) capillaries and proximal renal tubules. Its exact function is not known; however, it may have a role in inherited renal abnormalities of bicarbonate transport.

Anti-CA IV Picoband Antibody - Protein Information

Name CA4

Function

Reversible hydration of carbon dioxide. May stimulate the sodium/bicarbonate transporter activity of SLC4A4 that acts in pH homeostasis. It is essential for acid overload removal from the retina and retina epithelium, and acid release in the choriocapillaris in the choroid.

Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor.

Tissue Location

Expressed in the endothelium of the choriocapillaris in eyes (at protein level). Not expressed in the retinal epithelium at detectable levels.

Anti-CA IV Picoband Antibody - Protocols

Provided below are standard protocols that you

may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)