
Product Name: CA IV Rabbit Polyclonal Antibody**Catalog #: APRab07766**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight	35kDa

Antigen Information

Gene Name	CA4
Alternative Names	CA4; Carbonic anhydrase 4; Carbonate dehydratase IV; Carbonic anhydrase IV; CA-IV
Gene ID	762.0
SwissProt ID	P22748
Immunogen	Synthesized peptide derived from the Internal region of human CA IV.

Background

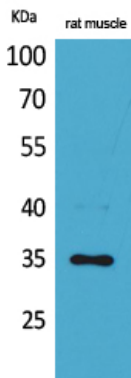
Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and

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. [provided by RefSeq, Jul 2008],catalytic activity:H(2)CO(3) = CO(2) + H(2)O.,cofactor:Zinc.,disease:Defects in CA4 are the cause of retinitis pigmentosa type 17 (RP17) [MIM:600852]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. RP17 inheritance is autosomal dominant,enzyme regulation:Inhibited by acetazolamide.,function:Reversible hydration of carbon dioxide. May stimulate the sodium/bicarbonate transporter activity of SLC4A4.,similarity:Belongs to the alpha-carbonic anhydrase family.,subunit:Interacts with SLC4A4.,tissue specificity:Expressed in the endothelium of the choriocapillaris in eyes (at protein level),,

Research Area

Nitrogen metabolism;

Image Data



Western Blot analysis of rat muscle cells using CA IV Polyclonal Antibody..
Secondary antibody was diluted at 1:20000