

ARG58375 anti-CA4 / Carbonic Anhydrase 4 antibody

Package: 50 μl Store at: -20°C

Summary

| Product Description | Rabbit Polyclonal antibody recognizes CA4 / Carbonic Anhydrase 4 |
|---------------------|--|
| Tested Reactivity | Hu |
| Predict Reactivity | Ms, Rat, Cow, Gpig, Hrs, Rb |
| Tested Application | IHC-P, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | CA4 / Carbonic Anhydrase 4 |
| Species | Human |
| Immunogen | Synthetic peptide around the C-terminal region of Human CA4. (within the following sequence: AFSQKLYYDKEQTVSMKDNVRPLQQLGQRTVIKSGAPGRPLPWALPALLG) |
| Conjugation | Un-conjugated |
| Alternate Names | CAIV; EC 4.2.1.1; Carbonic anhydrase IV; Car4; CA-IV; Carbonate dehydratase IV; RP17; Carbonic anhydrase 4 |

Application Instructions

| Predict Reactivity Note | Predicted homology based on immunogen sequence: Cow: 83%; Guinea Pig: 92%; Horse: 83%; Mouse: 85%; Rabbit: 85%; Rat: 85% | |
|-------------------------|--|---------------|
| Application table | Application | Dilution |
| | IHC-P | 1:600 |
| | WB | 0.2 - 1 μg/ml |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | Human lung | |

Properties

| Form | Liquid |
|---------------|---|
| Purification | Affinity purified. |
| Buffer | PBS, 0.09% (w/v) Sodium azide and 2% Sucrose. |
| Preservative | 0.09% (w/v) Sodium azide |
| Stabilizer | 2% Sucrose |
| Concentration | Batch dependent: 0.5 - 1 mg/ml |
| | |

| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
|---------------------|--|
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

| Gene Symbol | CA4 |
|----------------|---|
| Gene Full Name | carbonic anhydrase 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] |
| 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. [UniProt] |
| Calculated Mw | 35 kDa |

Images



ARG58375 anti-CA4 / Carbonic Anhydrase 4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung tissue stained with ARG58375 anti-CA4 / Carbonic Anhydrase 4 antibody at 1:600 dilution. Magnification: 20X.



ARG58375 anti-CA4 / Carbonic Anhydrase 4 antibody WB image

Western blot: Human lung lysate stained with ARG58375 anti-CA4 / Carbonic Anhydrase 4 antibody at 0.2 - 1 $\mu g/ml$ dilution.