

Rabbit anti-Mouse Carbonic Anhydrase IV Polyclonal Antibody | anti-CA4 antibody

Anti-Carbonic Anhydrase IV Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA257800	Rabbit	Mouse	Immunoprecipitation, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Carbonic Anhydrase IV; Polyclonal Antibody; Anti-Carbonic Anhydrase IV Antibody; Rabbit Polyclonal; Carbonic Anhydrase IV/Car4 Antibody; Rabbit PAb; Antigen Affinity Purified; Anti-AW456718 Antibody; Anti-Ca4 Antibody; Anti-Car4 Antibody; Anti-RP23-167D6.1 Antibody; carbonic anhydrase IV; anti-CA4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Mouse Car4
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid. 0.2um filtered solution in PBS
Applicable Applications for anti-CA4 antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant Mouse Car4 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Mouse Car4 (rM Car4; NP_031633.1; Met1-Ser277). Car4 specific IgG was purified by Mouse Car4 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

IMAGES



IP (Immunoprecipitation)

mCar4 was immunoprecipitated using: Lane A: 0.5 mg Mouse lung Whole Cell Lysate Lane B: 0.5 mg A-431 Whole Cell Lysate 4 uL anti- mCar4 rabbit polyclonal antibody and 60 ug of Immunomagnetic beads Protein A/G. Primary antibody: Anti- mCar4 rabbit polyclonal antibody, at 1:100 dilution Secondary antibody: Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 37kDa Observed band size :37 kDa



IHC (Immunohistochemistry)

Immunochemical staining of mouse Carbonic Anhydrase IV in mouse lung with rabbit polyclonal antibody at 1:2000 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohistochemistry)

Immunochemical staining of mouse Carbonic Anhydrase IV in mouse kidney with rabbit polyclonal antibody at 1:2000 dilution, formalin-fixed paraffin embedded sections.



WB (Western Blot)

Anti-Carbonic Anhydrase IV rabbit polyclonal antibody at 1:500 dilution Lane A: Mouse lung tissue lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 35 kDa Observed band size: 37 kDa (We are unsure as to the identity of these extra bands).

ADDITIONAL INFORMATION

Related Product Information for anti-CA4 antibody

Background: The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. The carbonic anhydrase (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase IV (CAIV) is a membrane-associated enzyme anchored to plasma membrane surfaces by a phosphatidylinositol glycan linkage. CAIV is a high-activity isozyme in CO₂ hydration comparable to that of CAII. Furthermore, CAIV is more active in HCO₃⁻ dehydration than is CAII. However, the esterase activity of CAIV is decreased 150-fold compared to CAII.

References

Lehtonen J, et al. (2004) Characterization of CA XIII, a Novel Member of the Carbonic Anhydrase Isozyme Family. The Journal of Biological Chemistry. 279: 2719-27. Lindskog S. (1997) Structure and mechanism of carbonic anhydrase. Pharmacology & Therapeutics. 74(1): 1-20. Baird TT, et al. (1997) Catalysis and Inhibition of Human Carbonic Anhydrase IV. Biochemistry. 36 (9): 2669-78.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/carbonic-anhydrase-iv-antibody-immunoprecipitation-immunohistochemistry-western-blot-elisa/257800>