

Rabbit anti-Human Carbonic anhydrase II Polyclonal Antibody | anti-CA2 antibody

Anti-Carbonic anhydrase II Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA254956	Rabbit	Human	Immunoprecipitation, ELISA, Western Blot

PRODUCT SYNONYMS

Carbonic anhydrase II; Polyclonal Antibody; Anti-Carbonic anhydrase II Antibody; Rabbit Polyclonal; Carbonic Anhydrase II/CA2 Antibody; Rabbit PAb; Antigen Affinity Purified; carbonic anhydrase II; Anti-CA-II Antibody; Anti-CAC Antibody; Anti-CAII Antibody; Anti-Car2 Antibody; Anti-HEL-76 Antibody; Anti-HEL-S-282 Antibody; anti-CA2 antibody

PRODUCT SPECIFICATIONS

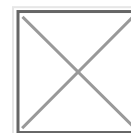
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human Carbonic Anhydrase II/CA2
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CA2 antibody	IP (Immunoprecipitation), ELISA, WB (Western Blot)
Immunogen	Recombinant Human Carbonic Anhydrase II/CA2 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human Carbonic Anhydrase II/CA2 (rh Carbonic Anhydrase II/CA2). Carbonic Anhydrase II/CA2 specific IgG was purified by Human Carbonic Anhydrase II/CA2 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.

IMAGES



WB (Western Blot)

Anti-CA2 rabbit polyclonal antibody at 1:500 dilution Lane A: HEK293 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 29 kDa Observed band size: 30 kDa (We are unsure as to the identity of these extra bands).



IP (Immunoprecipitation)

CA2 was immunoprecipitated using: Lane A: 0.5 mg 293T Whole Cell Lysate Lane B: 0.5 mg Caco-2 Whole Cell Lysate 2 uL anti-CA2 rabbit polyclonal antibody and 15 ul of 50 % Protein G agarose. Primary antibody: Anti-CA2 rabbit polyclonal antibody, at 1:500 dilution Secondary antibody: Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution Developed using the odssey technique. Performed under reducing conditions. Predicted band size: 29 kDa Observed band size: 29 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-CA2 antibody	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 anhydraseI (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase II is one of fourteen forms of human alpha carbonic anhydrases. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Renal carbonic anhydrase allows the reabsorption of sodium ions in the proximal tubule. Carbonic anhydrase II has been shown to interact with Band 3 and Sodium-hydrogen antiporter 1.
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>Lilias A, et al. (1972) Crystal Structure of Human Carbonic Anhydrase C. Nature new biology. 235: 131-7.Li XJ, et al. (2002) Carbonic Anhydrase II Binds to and Enhances Activity of the Na+/H+ Exchanger. The Journal of Biological Chemistry. 277: 36085-91.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557395
NCBI GeneID	760
NCBI Accession #	NP_000058.1
NCBI GenBank Nucleotide #	NM_000067.2
UniProt Accession #	P00918; Q6FI12; Q96ET9; B2R7G8
Molecular Weight	29,246 Da
NCBI Official Full Name	carbonic anhydrase 2 isoform 1
NCBI Official Synonym Full Names	carbonic anhydrase II
NCBI Official Symbol	CA2
NCBI Official Synonym Symbols	CAC; CAII; Car2; CA-II; HEL-76
NCBI Protein Information	carbonic anhydrase 2; carbonate dehydratase II; carbonic anhydrase B; carbonic anhydrase C; carbonic dehydratase; epididymis luminal protein 76
UniProt Protein Name	Carbonic anhydrase 2
UniProt Gene Name	CA2
UniProt Synonym Gene Names	CAC; CA-II
UniProt Entry Name	CAH2_HUMAN

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.