Rabbit anti-Human Carbonic Anhydrase III Polyclonal Antibody | anti-CA3 antibody

Anti-Carbonic Anhydrase III Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA254970	**Rabbit**	**Human**	**Immunohistochemistry, ELISA**

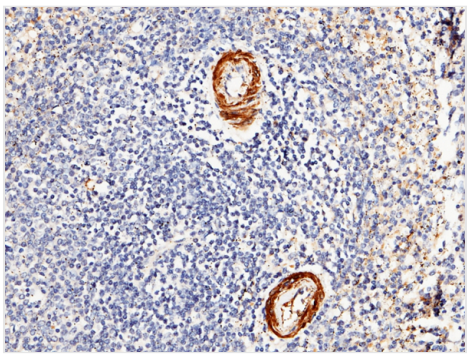
PRODUCT SYNONYMS

Carbonic Anhydrase III; Polyclonal Antibody; Anti-Carbonic Anhydrase III Antibody; Rabbit Polyclonal; Carbonic Anhydrase III/CA3 Antibody; Rabbit PAb; Antigen Affinity Purified; carbonic anhydrase III; Anti-CAIII Antibody; Anti-Car3 Antibody; anti-CA3 antibody

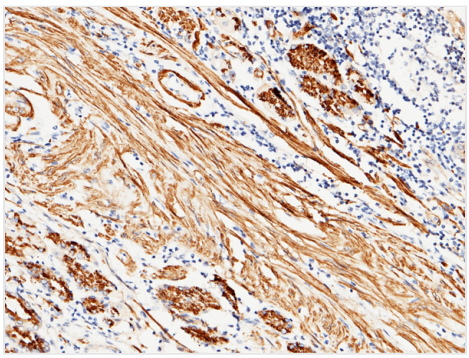
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human Carbonic Anhydrase III/CA3
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CA3 antibody	IHC (Immunohistochemistry), ELISA
Immunogen	Recombinant Human Carbonic Anhydrase III/CA3 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human Carbonic Anhydrase III/CA3 (rh Carbonic Anhydrase III/CA3). Carbonic Anhydrase III/CA3 specific IgG was purified by Human Carbonic Anhydrase III/CA3 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.

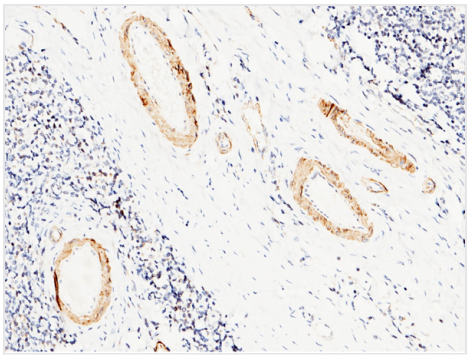
IMAGES



IHC (Immunohistochemisry)
Immunochemical staining of human CA3 in human spleen with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections). Positive staining was localized to smooth muscle of blood vessel.



IHC (Immunohiostchemistry)
Immunochemical staining of human CA3 in human stomach with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections). Positive staining was localized to smooth muscle.



IHC (Immunohistochemistry)
Immunochemical staining of human CA3 in human tonsil with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections). Positive staining was localized to smooth muscle of blood vessel.

ADDITIONAL INFORMATION

Related Product Information for anti-CA3 antibody	Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes first discovered in 1933 that catalyze the reversible hydration of carbon dioxide. CAs 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. Carbonic anhydrases (CAs) form a family of enzymes that catalyze the rapid conversion of carbon dioxide and water to bicarbonate and protons, a reaction that occurs rather slowly in the absence of a catalyst. The active site of most carbonic anhydrases contains a zinc ion, they are therefore classified as metalloenzymes. Several forms of carbonic anhydrase occur in nature. The primary function of the enzyme in animals is to interconvert carbon dioxide and bicarbonate to maintain acid-base balance in blood and other tissues, and to help transport carbon dioxide out of tissues. Plants contain a different form called beta-carbonic anhydrase, which, from an evolutionary standpoint, is a distinct enzyme, but participates in the same reaction and also uses a zinc ion in its active site. Carbonic anhydrase 3, also known as Carbonate dehydratase III, CA-III and CA3, is a cytoplasm protein which belongs to thealpha-carbonic anhydrase family. CA3 is activated by proton donors such as imidazole and the dipeptide histidylhistidine. It is inhibited by coumarins and sulfonamide derivatives such as acetazolamide. At 6 weeks gestation, transcripts accumulate at low levels in the somites and at high levels throughout the notochord. As gestation continues, CA3 becomes abundant in all developing muscle masses and continues at high to moderate levels in the notochord.
References	Ivanov, S.V. et al., 1998, Proc. Natl. Acad. Sci. USA 95:12596-601. Sowden J. et al., 1998, Gene 214:157-65. Strausberg, R.L. et al., 2002, Proc. Natl. Acad. Sci. USA 99:16899-903. Liao, S.Y. et al., 2003, J. Med. Genet. 40: 257-62. Bataller, L. et al., 2004, Ann Neurol 56 (4): 575-9.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4885099
NCBI GeneID	761
NCBI Accession #	NP_005172.1
NCBI GenBank Nucleotide #	NM_005181.3
UniProt Accession #	P07451; O60842; B2R867; B3KUC8
Molecular Weight	29,557 Da
NCBI Official Full Name	carbonic anhydrase 3
NCBI Official Synonym Full Names	carbonic anhydrase III, muscle specific
NCBI Official Symbol	CA3
NCBI Official Synonym Symbols	Car3; CAIII
NCBI Protein Information	carbonic anhydrase 3; CA-III; carbonate dehydratase III
UniProt Protein Name	Carbonic anhydrase 3

UniProt Gene Name	**CA3**
UniProt Synonym Gene Names	CA-III
UniProt Entry Name	CAH3_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/polyclonal/carbonic-anhydrase-iii-antibody-immunohistochemistry-elisa/254970