

Product datasheet for **AP50693PU-N**

Carbonic Anhydrase I (CA1) (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1000. Western blot: 1/50 - 1/100. Immunohistochemistry on paraffin sections: 1/10 - 1/50.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 67-98 amino acids from the N-terminal region of human CA1
Specificity:	This antibody reacts to CA1.
Formulation:	PBS State: Purified State: Liquid purified Ig fraction Preservative: 0.09% (W/V) sodium azide
Concentration:	lot specific
Purification:	Saturated Ammonium Sulfate (SAS) precipitation
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	28870 Da
Gene Name:	carbonic anhydrase 1
Database Link:	Entrez Gene 759 Human P00915



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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. CA1 is closely linked to CA2 and CA3 genes on chromosome 8, and it encodes a cytosolic protein which is found at the highest level in erythrocytes. Variants of this gene have been described in some populations. Multiple alternatively spliced variants, encoding the same protein, have been identified. Transcript variants of CA1 utilizing alternative polyA_sites have been described in literature.

Synonyms:

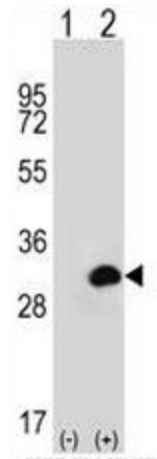
Carbonic anhydrase I, Carbonate dehydratase I, Carbonic anhydrase B, CA1, CAB, CA-I

Protein Families:

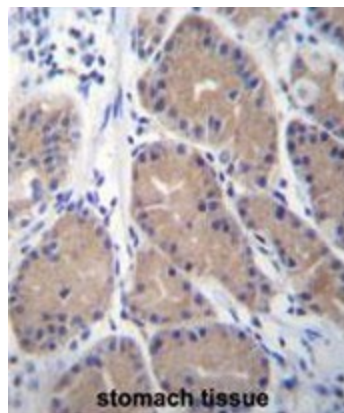
Druggable Genome

Protein Pathways:

Nitrogen metabolism

Product images:


Western blot analysis of CA1 (arrow) using rabbit polyclonal CA1 Antibody (N-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CA1 gene.



CA1 Antibody (N-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CA1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.