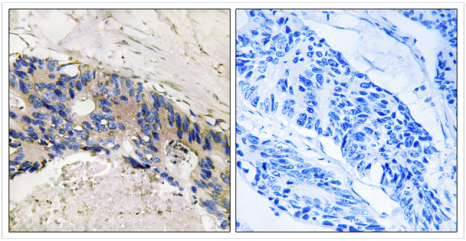
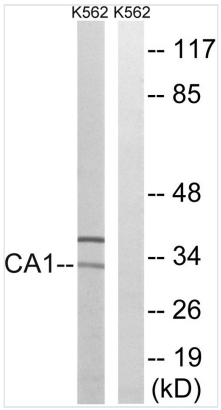
CA1 Antibody

PRODUCT OVERVIEW

Product Name	CA1, Antibody
Full Product Name	CA1 Antibody
Product Gene Name	anti-CA1 antibody
Product Synonym Names	Carbonic anhydrase 1; EC 4.2.1.1; Carbonic anhydrase I; Carbonate dehydratase I; CA-I; Carbonic anhydrase B; CAB
Species Reactivity	Human
Form/Format	In phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Specificity	CA1 antibody detects endogenous levels of total CA1 protein.
Preparation and Storage	Store at-20 degree C for 1 year.
Molecular Weight	28,870 Da
OMIM	114800
3D Structure	ModBase 3D Structure for P00915
Immunogen	The antiserum was produced against synthesized peptide derived from internal of human CA1.
Product Categories/Family for anti-CA1 antibody	Autophagy antibody; Cancer; Cardiovascular; Cell Biology; Epigenetics & Nuclear Signaling; Developmental Biologys; Immunology; Drug Discovery Products; Metabolism; Neuroscience; Signal Transduction; Stem Cells
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CA1 antibody	Western Blot (WB), Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-CA1 antibody	WB: 1:500~1:1000 IHC: 1:50~1:100 ELISA: 1:40000
Related Product Information for anti-CA1 antibody	MBS856429 is an antibody targeting CA1. Also known as CA1 Antibody. Reactive in Human.
Product References and Citations for anti-CA1 antibody	Barlow J.H., Nucleic Acids Res. 15:2386-2386(1987). Lowe N., Gene 93:277-283(1990). Giraud N., Biochimie 56:1031-1043(1974).
Other Notes	Small volumes of anti-CA1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Testing Data of anti-CA1 antibody
Peptide-+



Immunohistochemistry (IHC) of anti-CA1 antibody
Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using CA1 antibody. Western blot analysis of extracts from K562 cells, using CA1 antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CA1. It may not necessarily be applicable to this product.

NCBI GI #	192447430
NCBI GeneID	759
NCBI Accession #	NP_001122301.1
UniProt Primary Accession #	P00915
UniProt Related Accession #	P00915
GenBank Nucleotide #	NM_001128829.3
NCBI Official Full Name	carbonic anhydrase 1 isoform a
NCBI Official Synonym Full Names	carbonic anhydrase 1
NCBI Official Symbol	CA1
NCBI Official Synonym Symbols	CAB; CA-I; Car1; HEL-S-11
UniProt Protein Name	Carbonic anhydrase 1
UniProt Synonym Protein Names	Carbonate dehydratase I; Carbonic anhydrase B; CAB; Carbonic anhydrase I; CA-I
Protein Family	Actin
UniProt Gene Name	CA1
UniProt Synonym Gene Names	CAB; CA-I
NCBI Protein Information	carbonic anhydrase 1
NCBI Summary for CA1	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 CA1 gene is closely linked to the CA2 and CA3 genes on chromosome 8. It encodes a cytosolic protein that is found at the highest level in erythrocytes. Allelic variants of this gene have been described in some populations. Alternative splicing and the use of alternative promoters results in multiple transcript variants. [provided by RefSeq, Nov 2016]
UniProt Comments for CA1	Reversible hydration of carbon dioxide. Can hydrates cyanamide to urea.
Research Articles on CA1	**1.** These six-membered carbocycles showed nice inhibitory action against AChE and human carbonic anhydrase (hCA) II and I isoforms. The hCA I, II, and AChE were efficiently inhibited by these molecules, with Ki values in the range of 6.70-35.85 nM for hCA I, 18.77-60.84 nM for hCA II, and 0.74-4.60 for AChE, respectively

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