

Carbonic Anhydrase 1 (CA1) Active Protein | CA1 active protein

Recombinant Human Carbonic Anhydrase 1 (CA1)

CATALOG # AAA235617	HOST E Coli
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PRODUCT SYNONYMS

Carbonic Anhydrase 1 (CA1); Recombinant Human Carbonic Anhydrase 1 (CA1); Carbonic Anhydrase 1; Carbonate Dehydratase I; Carbonic Anhydrase B; CAB; Carbonic Anhydrase I; CA-I; CA1; CA1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	0.2 µm Filtered 20 mM Tris-HCl, 150 mM NaCl, 10% Glycerol, pH 8.0
Sequence Positions	2-261aa; Full Length of Mature Protein
Sequence	ASPDWGYDDK NGPEQWSKLY PIANGNNQSP VDIKTSETKH DTSCLKPISVS YNPATAKEII NVGHSFHVNF EDNDNRSVLK GGPFSDSYRL FQFHFWGST NEHGSEHTVD GVKYSAELHV AHWNSAKYSS LAEAASKADG LAVIGVLMKV GEANPKLQKV LDALQAIKTK GKRAPFTNFD PSTLLPSSLD FWTPGSLTH PPLYESVTWI ICKESISVSS EQLAQFRSL SNVEGDNAV MPQHNNRPTQP LKGRTVRASF
Species	Human
Tag	C-terminal 6xHis-tagged
Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Biological Activity	The esterase activity is determined to be greater than 500 pmol/min/ug
Subcellular Location	Cytoplasm
Protein Families	Alpha-Carbonic Anhydrase Family
Classification	Other Recombinant Protein
Preparation and Storage	Store at -20 degree C. For extended storage, conserve at -20 degree C or -80 degree C. Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week.

ADDITIONAL INFORMATION

Related Product Information for CA1 active protein	Relevance: Carbonic Anhydrase 1 (CA1) is a cytosolic enzyme, belonging to the alpha-carbonic anhydrase family. It is highly expressed in erythrocytes and acts as an early marker for erythroid differentiation. Carbonic anhydrase 1 plays a important role in many biological processes such as calcification, cellular respiration, bone resorption, acid-base balance. It is activated by imidazole, histamine, L-adrenaline, L- and D-histidine, and L- and D-phenylalanine. At the same time, It is inhibited by sulfonamide derivatives and coumarins. In addition, CA1 is a zinc metalloenzyme that has reversible hydration of carbon dioxide. It can hydrate cyanamide to urea. Function: Reversible hydration of carbon dioxide. Can hydrates cyanamide to urea.
Product Categories/Family for CA1 active protein	Cell Biology

NCBI AND UNIPROT INFORMATION

NCBI GI #	192447430
NCBI GeneID	759
NCBI Accession #	NP_001122301.1
NCBI GenBank Nucleotide #	NM_001128829.3
UniProt Accession #	P00915
Molecular Weight	29.93 kDa
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
NCBI Protein Information	carbonic anhydrase 1
UniProt Protein Name	Carbonic anhydrase 1
UniProt Gene Name	CA1
UniProt Synonym Gene Names	CAB; CA-I
UniProt Entry Name	CAH1_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.

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Online datasheet: <https://www.aaabiotech.com/e-coli-active-protein/carbonic-anhydrase-1-ca1/235617>