

Carbonic anhydrase 1 Active Protein | CA1 active protein

Carbonic anhydrase 1, 1-261 aa, Human, His tag, E Coli (Bioactivity Validated)

CATALOG # AAA48917	HOST E Coli	APPLICATIONS SDS-Page
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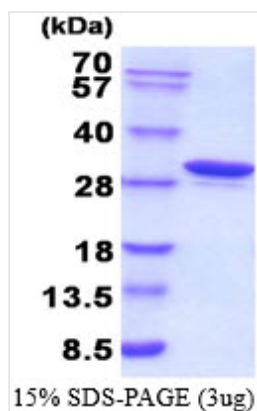
PRODUCT SYNONYMS

Carbonic anhydrase 1; 1-261 aa; Human; His tag; E Coli (Bioactivity Validated); CA1; CA-I; CAB; CA1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 95% by SDS-PAGE
Form/Format	Liquid. In 20 mM Tris-HCl Buffer (pH 8.0) containing 1mM DTT, 10% glycerol
Concentration	1 mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MGSSHHHHH SSGLVPRGSH MASPDWGYDD KNGPEQWSKL YPIANGNNQS PVDIKTSETK HDTSLKPISV SYNPATAKEI INVGHSFHVN FEDNDNRSVL KGGPFSDSYR LFQFHFHWGS TNEHGSEHTV DGVKYSALH VAHWNSAKYS SLAEAASKAD GLAVIGVLMK VGEANPKLQK VLDALQAIKT KGKRAPFTNF DPSTLLPSSL DFWTYPGSLT HPPLYESVTW IICKESISVS SEQLAQFRSL LSNVEGDNAV PMQHNNRPTQ PLKGRTVRAS F
Sequence Length	261
Applicable Applications for CA1 active protein	SDS-PAGE, Enzyme Activity
Antigen Species	Human
Tag Information	His-tag
Biological Activity	Specific activity is > 300 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-nitrophenyl acetate to 4-nitrophenol per minute at pH 8.0 at 37C.
Preparation and Storage	Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CA1 active protein	Carbonic anhydrase (CA) is an enzyme that catalyses rapid conversion of carbon dioxide to bicarbonate and protons (CO2 + H2O <-> HCO3- + H+). Most carbonic anhydrases contain a zinc ion in their active site and the primary function of this enzyme is known to maintain acid-base balance in blood and other tissues, and to help transport carbon dioxide of tissues. Carbonic anhydrases have been found in all kingdoms of life. Recombinant carbonic anhydrase fused to His-tag, was expressed in E Coli and purified by conventional chromatography techniques.
Product Categories/Family for CA1 active protein	Metabolism; Differentiation & Regeneration
References	Nogradi A., et al. (1998). Am J Pathol. 153:1-4.; Ferry JG., et al. (1999). Proc Natl Acad Sci U S A. 96 (26):15184-9.

NCBI AND UNIPROT INFORMATION

NCBI GI #	192447430
NCBI GeneID	759
NCBI Accession #	NP_001122301
NCBI GenBank Nucleotide #	NM_001128829.3
UniProt Accession #	P00915
Molecular Weight	31.0 kDa (281aa), confirmed by MALDI-TOF
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

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.