

Carbonic anhydrase 2 Active Protein | CA2 active protein

Carbonic anhydrase 2, 1-260aa, Human, E Coli (Bioactivity Validated)

CATALOG # AAA48538	HOST E Coli	APPLICATIONS SDS-Page
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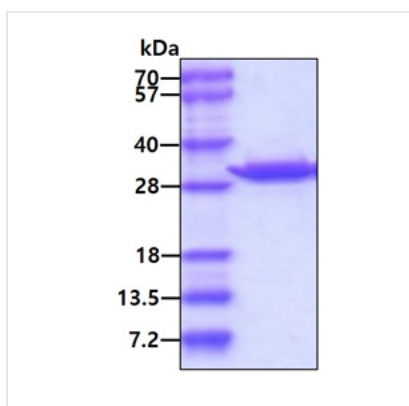
PRODUCT SYNONYMS

Carbonic anhydrase 2; 1-260aa; Human; E Coli (Bioactivity Validated); CA-II; CAC; CA 2; CA II; CA2; CAI; Car 2; Car2; Carbonate dehydratase II; Carbonic anhydrase B; Carbonic anhydrase C; Carbonic anhydrase II; Carbonic dehydratase.; CA2 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, 50mM NaCl, 10% glycerol
Concentration	1 mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MSHHWGYGKH NGPEHWHKDF PIAKGERQSP VDIDTHTAKY DPSLKPLSVS YDQATSLRIL NNGHAFNVEF DDSQDKAVLK GGPLDGTYRL IQFHFWGSL DGQGSEHTVD KKKYAAELHL VHWNTKYGDF GKAVQQPDGL AVLGIFLKVG SAKPGLQKV V DVLDSIKTKG KSADFTNFD P RGLLPESLDY WTYPGSLTTP PLLEC VTWIV LKEPISVSSE QVLKFRKLN F NGEGEPEELM VDNWRPAQPL KNRQIKASF K
Sequence Length	260
Applicable Applications for CA2 active protein	Enzyme Activity, SDS-PAGE
Domain	1-260aa
Biological Activity	Specific activity is > 7,000 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.
Tag	Non-tagged
Preparation and Storage	Can be stored at 2 degree C to 8 degree C for 1 week. For long term storage, aliquot and store at -20 degree C to -80 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

ADDITIONAL INFORMATION

Related Product Information for CA2 active protein	Carbonic anhydrase 2 (CA2) is one of fourteen forms of human alpha carbonic anhydrases. Carbonic anhydrase catalyzes reversible hydration of carbon dioxide. CA2 is a cytosolic enzyme with the highest activity among all known CAs. Mutations in the CA2 gene result in the CA2 deficiency syndrome, an autosomal recessive disorder that produces osteopetrosis, renal tubular acidosis and cerebral calcification. Recombinant human CA2 was expressed in E Coli and purified by using conventional chromatography.
Product Categories/Family for CA2 active protein	Enzymes & Proteases
References	Hu PY., et al. (1992). Hum Mutat. 1 (4):288-92 ; Venta PJ., et al. (1991). Am J Hum Genet. 49 (5):1082-90;

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557395
NCBI GeneID	760
NCBI Accession #	NP_000058
NCBI GenBank Nucleotide #	NM_000067.2
UniProt Accession #	P00918; Q6FI12; Q96ET9; B2R7G8
Molecular Weight	29.2 kDa (260aa), confirmed by MALDI-TOF.
NCBI Official Full Name	carbonic anhydrase 2 isoform 1
NCBI Official Synonym Full Names	carbonic anhydrase 2
NCBI Official Symbol	CA2
NCBI Official Synonym Symbols	CAC; CAII; Car2; CA-II; HEL-76; HEL-S-282
NCBI Protein Information	carbonic anhydrase 2
UniProt Protein Name	Carbonic anhydrase 2
UniProt Gene Name	CA2
UniProt Synonym Gene Names	CAC; CA-II

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://stage.aaabiotech.com/e-coli-active-protein/carbonic-anhydrase-2/48538>