

Carbonic Anhydrase II Active Protein | CA-II active protein

Recombinant Human Carbonic Anhydrase II Protein

CATALOG #
AAA281421

HOST
E Coli

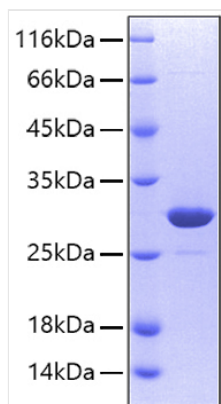
PRODUCT SYNONYMS

Carbonic Anhydrase II; Recombinant Human Carbonic Anhydrase II Protein; CAC; CAII; Car2; HEL-76; HEL-S-282; CA-II active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>90% by SDS-PAGE.
Form/Format	Lyophilized from a 0.22 um filtered solution of 20mM Tris, 150mM NaCl, pH 8.0.
Sequence Length	260
Species	Human
Endotoxin	< 0.1 EU/ug of the protein by LAL method.
Biological Activity	Measured by its esterase activity. The specific activity is >840 pmoles/min/ug, as measured with 1 mM 4-Nitrophenyl acetate and 0.1 ug enzyme at 400 nm in 100 μ L of 12.5 mM Tris, 75 mM NaCl, pH 7.5
Reconstitution	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Preparation and Storage	Store the lyophilized protein at -20°C to -80°C for long term. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

IMAGES



SDS-PAGE

Recombinant Human Carbonic anhydrase II Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 30 kDa.

ADDITIONAL INFORMATION

Related Product Information for CA-II active protein	Background: The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. CA2 is a cytosolic enzyme with the highest activity among all known CAs. Mutations in the CA2 gene result in the CA II deficiency syndrome, an autosomal recessive disorder that produces osteopetrosis, renal tubular acidosis and cerebral calcification.
Product Categories/Family for CA-II active protein	Other Recombinant Protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	115456
NCBI GeneID	760
UniProt Accession #	P00918
NCBI Official Full Name	Carbonic anhydrase 2
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
UniProt Entry Name	CAH2_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/e-coli-ca-ii-active-protein/carbonic-anhydrase-ii/281421>