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Datasheet for ABIN7317854 CA2 Protein (His tag)

Overview

Quantity:	100 µg
Target:	CA2
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CA2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Carbonic Anhydrase II/CA2 Protein (His Tag)(Active)
Sequence:	Met 1-Lys 260
Characteristics:	A DNA sequence encoding the human CA2 (NP_000058.1) (Met 1-Lys 260) was expressed, with a polyhistidine tag at the C-terminus.
Purity:	> 96 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by its esterase activity. The specific activity is >150 pmoles/min/µg.

Target Details

Target:	CA2
Alternative Name:	Carbonic Anhydrase II/CA2 (CA2 Products)
Background:	Background: The carbonic anhydrases (or carbonate dehydratases) are classified as

Target Details

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. The carbonic anhydrase I (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase II is one of fourteen forms of human α carbonic anhydrases. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Renal carbonic anhydrase allows the reabsorption of sodium ions in the proximal tubule. Carbonic anhydrase II has been shown to interact with Band 3 and Sodium-hydrogen antiporter 1.

Synonym: CA-II;CAC;CAII;Car2;HEL-76;HEL-S-282

Molecular Weight: 30 kDa

NCBI Accession: [NP_000058](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris 0.5M NaCl, pH 8.0

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.