

Bioactive

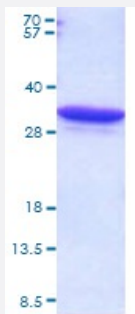
Full-Length

CA1 (Human) Recombinant Protein

Catalog # P6803

Size 20 ug

Applications



15% SDS-PAGE Stained with Coomassie Blue.

Specification

Product Description	Human CA1 (NP_001122301, 1 a.a. - 261 a.a.) full length recombinant protein with His tag expressed in <i>Escherichia coli</i> .
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	31
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purity	> 95% by SDS-PAGE
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 37°C.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue 15% SDS-PAGE Stained with Coomassie Blue.
Recommend Usage	SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM Tris-HCl, 1 mM DTT, pH 8.0 (10% glycerol)

Storage Instruction

Store at -20°C. For long term storage store at -80°C.
Aliquot to avoid repeated freezing and thawing.

Applications

- SDS-PAGE

Gene Info — CA1

Entrez GeneID [759](#)

Protein Accession# [P00915](#)

Gene Name CA1

Gene Alias Car1

Gene Description carbonic anhydrase I

Omim ID [114800](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA1 is closely linked to CA2 and CA3 genes on chromosome 8, and it encodes a cytosolic protein which is found at the highest level in erythrocytes. Variants of this gene have been described in some populations. Multiple alternatively spliced variants, encoding the same protein, have been identified. Transcript variants of CA1 utilizing alternative polyA_sites have been described in literature. [provided by RefSeq]

Other Designations carbonic dehydratase

Pathway

- [Nitrogen metabolism](#)

Disease

- [Diabetic Retinopathy](#)