

[Go to Product page](#)

Datasheet for ABIN7194565 CA4 Protein (His tag)

Overview

Quantity:	10 µg
Target:	CA4
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CA4 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Carbonic Anhydrase 4/CA4 Protein (His Tag)(Active)
Sequence:	Met 1-Lys283
Characteristics:	A DNA sequence encoding the human CA4 (NP_000708.1) (Met1-Lys283) without the pro peptide was expressed, fused with a polyhistidine tag at the C-terminus.
Purity:	> 96 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its esterase activity. The specific activity is >2 pmoles/min/µg.

Target Details

Target:	CA4
Alternative Name:	Carbonic Anhydrase 4/CA4 (CA4 Products)

Target Details

Background:	<p>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. The carbonic anhydrase I (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase IV (CAIV) is a membrane-associated enzyme anchored to plasma membrane surfaces by a phosphatidylinositol glycan linkage. CAIV is a high-activity isozyme in CO₂ hydration comparable to that of CAII. Furthermore, CAIV is more active in HCO₃⁻ dehydration than is CAII. However, the esterase activity of CAIV is decreased 150-fold compared to CAII.</p> <p>Synonym: Carbonic Anhydrase 4, Carbonate Dehydratase IV, Carbonic Anhydrase IV, CA-IV, CA4,CAIV,Car4,RP17</p>
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Molecular Weight:	31.7 kDa
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NCBI Accession:	NP_000708
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Reconstitution:	Please refer to the printed manual for detailed information.
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Buffer:	Lyophilized from sterile PBS, pH 7.4
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	<p>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.</p>
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