

## Datasheet for ABIN7194589

# **CA14 Protein (His tag)**



#### Overview

Quantity:	50 μg
Target:	CA14
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CA14 protein is labelled with His tag.

### **Product Details**

Purpose:	Recombinant Human Carbonic Anhydrase 14/CA14 Protein (HEK293 Cells, His Tag)
Sequence:	Met 1-Met 290
Characteristics:	A DNA sequence encoding the extracellular domain of human CA14 (NP_036245.1) (Met 1-Met 290) was expressed with a C-terminal polyhistidine tag.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

# Target Details

Target:	CA14
Alternative Name:	Carbonic Anhydrase 14/CA14 (CA14 Products)
Background:	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 anhydrasekl (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. CAXIV is a member of CA family that showed an overall similarity of 29–46% to other active CA isozymes. The highest percentage similarity was with a transmembrane CA isoform, CAXII. The CAXIV was found high concentrations in human heart, brain, liver, and skeletal muscle but lower in the colon, small intestine, urinary bladder, and kidney. No CAXIV mRNA was seen in the salivary gland and pancreas. CAXIV is a likely candidate for the extracellular CA postulated to have an important role in modulating excitatory synaptic transmission in brain.

Synonym: Carbonic Anhydrase 14; Carbonate Dehydratase XIV; Carbonic Anhydrase XIV; CA-XIV; CA14; UNQ690/PRO1335

Molecular Weight:

32.3 kDa

NCBI Accession:

NP\_036245

### **Application Details**

Restrictions:

For Research Use only

#### Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
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.