

## ARG82250 Human CA1 / Carbonic Anhydrase 1 ELISA Kit

Package: 96 wells

Store at: 4°C

### Component

Cat. No.	Component Name	Package	Temp
ARG82250-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82250-002	Standard	2 X 20 ng/vial	4°C
ARG82250-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82250-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82250-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82250-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82250-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82250-008	25X Wash buffer	20 ml	4°C
ARG82250-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82250-010	STOP solution	10 ml (Ready to use)	4°C
ARG82250-011	Plate sealer	4 strips	Room temperature

### Summary

Product Description	ARG82250 Human CA1 / Carbonic Anhydrase 1 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CA1 / Carbonic Anhydrase 1 in serum, plasma (heparin, EDTA, citrate) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	CA1 / Carbonic Anhydrase 1
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	156 pg/ml
Sample Type	Serum, plasma (heparin, EDTA, citrate) and cell culture supernatants.
Standard Range	312 - 20000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.6%

Inter-Assay CV: 5.1%

**Alternate Names**

Carbonic anhydrase I; EC 4.2.1.1; Carbonate dehydratase I; Carbonic anhydrase B; Car1; HEL-S-11; CA-I; Carbonic anhydrase 1; CAB

## Application Instructions

---

**Assay Time** ~ 5 hours

## Properties

---

**Form** 96 well

**Storage instruction** Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

---

**Gene Symbol** CA1

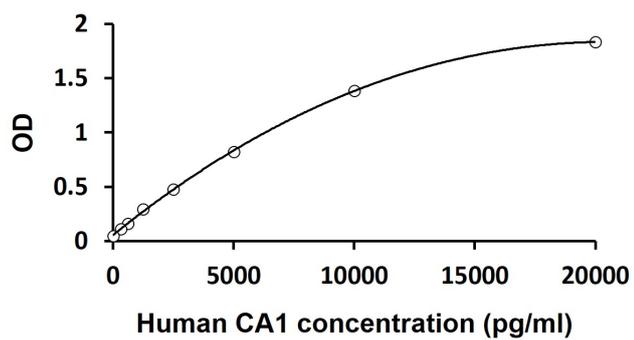
**Gene Full Name** carbonic anhydrase I

**Background** 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. This CA1 gene is closely linked to the CA2 and CA3 genes on chromosome 8. It encodes a cytosolic protein that is found at the highest level in erythrocytes. Allelic variants of this gene have been described in some populations. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

**Function** Reversible hydration of carbon dioxide. Can hydrates cyanamide to urea. [UniProt]

**Highlight** Related products:  
[Carbonic Anhydrase antibodies:](#) [Carbonic Anhydrase ELISA Kits:](#)  
New ELISA data calculation tool:  
[Simplify the ELISA analysis by GainData](#)

**Cellular Localization** Cytoplasm. [UniProt]



ARG82250 Human CA1 / Carbonic Anhydrase 1 ELISA Kit standard curve image

ARG82250 Human CA1 / Carbonic Anhydrase 1 ELISA Kit results of a typical standard run with optical density reading at 450 nm.