

## ARG82360 Human CA2 / Carbonic Anhydrase 2 ELISA Kit

Package: 96 wells  
Store at: 4°C

### Component

Cat. No.	Component Name	Package	Temp
ARG82360-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82360-002	Standard	2 X 50 ng/vial	4°C
ARG82360-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82360-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82360-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82360-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82360-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82360-008	25X Wash buffer	20 ml	4°C
ARG82360-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82360-010	STOP solution	10 ml (Ready to use)	4°C
ARG82360-011	Plate sealer	4 strips	Room temperature

### Summary

Product Description	ARG82360 Human CA2 / Carbonic Anhydrase 2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CA2 / Carbonic Anhydrase 2 in serum, plasma (EDTA, heparin, citrate), cell culture supernatants and urine.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	CA2 / Carbonic Anhydrase 2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.39 ng/ml
Sample Type	Serum, plasma (EDTA, heparin, citrate), cell culture supernatants and urine.
Standard Range	0.78 - 50 ng/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 4.3%

Inter-Assay CV: 5.3%

#### Alternate Names

Carbonic anhydrase C; EC 4.2.1.1; Car2; Carbonate dehydratase II; CA-II; Carbonic anhydrase II; CAC; HEL-76; Carbonic anhydrase 2; CAII

## Application Instructions

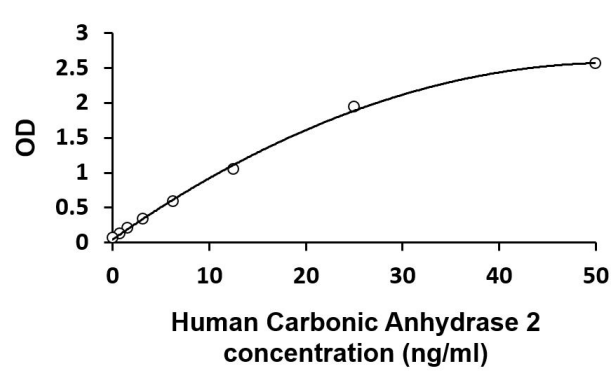
Assay Time ~ 5 hours

## 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	CA2
Gene Full Name	carbonic anhydrase II
Background	The protein encoded by this gene is one of several isozymes of carbonic anhydrase, which catalyzes reversible hydration of carbon dioxide. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2014]
Function	Essential for bone resorption and osteoclast differentiation (By similarity). Reversible hydration of carbon dioxide. Can hydrate cyanamide to urea. Involved in the regulation of fluid secretion into the anterior chamber of the eye. Contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption. Stimulates the chloride-bicarbonate exchange activity of SLC26A6. [UniProt]
Highlight	Related products: <a href="#">Carbonic Anhydrase antibodies</a> ; <a href="#">Carbonic Anhydrase ELISA Kits</a> ; New ELISA data calculation tool: <a href="#">Simplify the ELISA analysis by GainData</a>
Cellular Localization	Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells. [UniProt]



ARG82360 Human CA2 / Carbonic Anhydrase 2 ELISA Kit standard curve image

ARG82360 Human CA2 / Carbonic Anhydrase 2 ELISA Kit results of a typical standard run with optical density reading at 450 nm.