

ARG82425 Mouse CA4 / Carbonic Anhydrase 4 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82425-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82425-002	Standard	2 X 10 ng/vial	4°C
ARG82425-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82425-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82425-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82425-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82425-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82425-008	25X Wash buffer	20 ml	4°C
ARG82425-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82425-010	STOP solution	10 ml (Ready to use)	4°C
ARG82425-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82425 Mouse CA4 / Carbonic Anhydrase 4 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse CA4 / Carbonic Anhydrase 4 in serum, plasma (EDTA, heparin, citrate), cell culture supernatants and urine.
Tested Reactivity	Ms
Tested Application	ELISA
Target Name	CA4 / Carbonic Anhydrase 4
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	50 pg/ml
Sample Type	Serum, plasma (EDTA, heparin, citrate), cell culture supernatants and urine.
Standard Range	78 - 5000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.4%

Inter-Assay CV: 5.9%

Alternate Names

CAIV; EC 4.2.1.1; Carbonic anhydrase IV; Car4; CA-IV; Carbonate dehydratase IV; RP17; Carbonic anhydrase 4

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 CA4

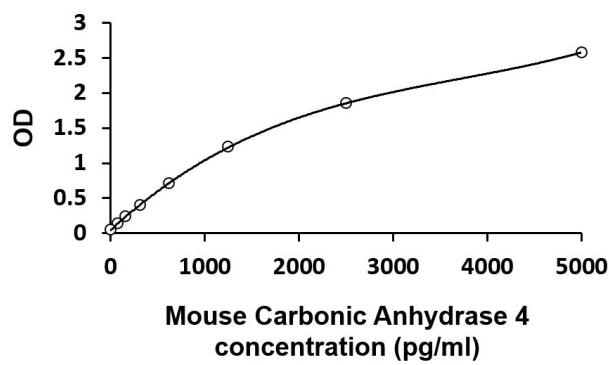
Gene Full Name carbonic anhydrase IV

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 gene encodes a glycosylphosphatidyl-inositol-anchored membrane isozyme expressed on the luminal surfaces of pulmonary (and certain other) capillaries and proximal renal tubules. Its exact function is not known; however, it may have a role in inherited renal abnormalities of bicarbonate transport. [provided by RefSeq, Jul 2008]

Function Reversible hydration of carbon dioxide. May stimulate the sodium/bicarbonate transporter activity of SLC4A4 that acts in pH homeostasis. It is essential for acid overload removal from the retina and retina epithelium, and acid release in the choriocapillaris in the choroid. [UniProt]

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

Cellular Localization Cell membrane; Lipid-anchor, GPI-anchor. [UniProt]



ARG82425 Mouse CA4 / Carbonic Anhydrase 4 ELISA Kit standard curve image

ARG82425 Mouse CA4 / Carbonic Anhydrase 4 ELISA Kit results of a typical standard run with optical density reading at 450 nm.