

ARG82856 Human CA3 / Carbonic Anhydrase 3 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82856-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82856-002	Standard	2 X 50 ng/vial	4°C
ARG82856-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82856-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82856-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82856-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82856-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82856-008	25X Wash buffer	20 ml	4°C
ARG82856-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82856-010	STOP solution	10 ml (Ready to use)	4°C
ARG82856-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82856 Human CA3 / Carbonic Anhydrase 3 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CA3 / Carbonic Anhydrase 3 in serum, plasma (EDTA, heparin, citrate), cell culture supernatants and urine.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	CA3 / Carbonic Anhydrase 3
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: 4.9%

Inter-Assay CV: 5.5%

Alternate Names

CAIII; EC 4.2.1.1; Car3; CA-III; Carbonate dehydratase III; Carbonic anhydrase 3; Carbonic anhydrase III

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

CA3

Gene Full Name

carbonic anhydrase III

Background

Carbonic anhydrase III (CAIII) is a member of a multigene family (at least six separate genes are known) that encodes carbonic anhydrase isozymes. These carbonic anhydrases are a class of metalloenzymes that catalyze the reversible hydration of carbon dioxide and are differentially expressed in a number of cell types. The expression of the CA3 gene is strictly tissue specific and present at high levels in skeletal muscle and much lower levels in cardiac and smooth muscle. A proportion of carriers of Duchenne muscle dystrophy have a higher CA3 level than normal. The gene spans 10.3 kb and contains seven exons and six introns. [provided by RefSeq, Oct 2008]

Function

Reversible hydration of carbon dioxide. [UniProt]

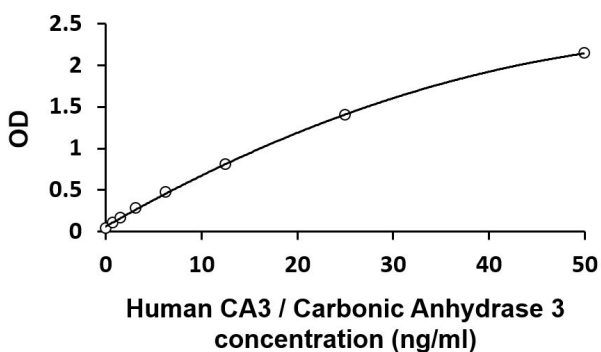
PTM

S-glutathionylated in hepatocytes under oxidative stress. [UniProt]

Cellular Localization

Cytoplasm. [UniProt]

Images



ARG82856 Human CA3 / Carbonic Anhydrase 3 ELISA Kit standard curve image

ARG82856 Human CA3 / Carbonic Anhydrase 3 ELISA Kit results of a typical standard run with optical density reading at 450 nm.