

# Product datasheet

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## ARG82608 Human CA12 / Carbonic Anhydrase 12 ELISA Kit

Package: 96 wells Store at: 4°C

### **Summary**

Product Description ARG82608 Human CA12 / Carbonic Anhydrase 12 ELISA Kit is an Enzyme Immunoassay kit for the

quantification of Human CA12 / Carbonic Anhydrase 12 in serum, plasma and cell culture supernatants.

Tested Reactivity Hu

Tested Application ELISA

Specificity This kit could assay both natural and recombinant Human CA12.

No significant cross-reactivity or interference was observed in the following samples:

Human: IFN gamma, IL1 beta, IL2, IL4, IL5, IL6, IL8, IL10, IL12, IL17A, IL18, IL21, IL22, IL23, MCP1, TGF

beta 1, TNF alpha and VEGF.

Mouse: GM-CSF, IFN gamma, IL1 beta, IL2, IL4, IL6, IL10, IL17A and TNF alpha.

Rat: IFN gamma, IL1 beta, IL4, IL6, IL10 and TNF alpha.

Target Name CA12 / Carbonic Anhydrase 12

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 39 pg/ml

Sample Type Serum, plasma and cell culture supernatants.

Standard Range 78 - 5000 pg/ml

Sample Volume  $50 \mu l$ 

Precision Intra-Assay CV: 2.2%

Inter-Assay CV: 2.9%

Alternate Names Carbonic anhydrase 12; Tumor antigen HOM-RCC-3.1.3; EC 4.2.1.1; HsT18816; Carbonic anhydrase XII;

CAXII; CA-XII; Carbonate dehydratase XII

### **Application Instructions**

Assay Time ~ 2.5 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 CA12

Gene Full Name carbonic anhydrase XII

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. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Three transcript variants encoding different isoforms have been identified

for this gene. [provided by RefSeq, Jun 2014]

Function Reversible hydration of carbon dioxide. [UniProt]

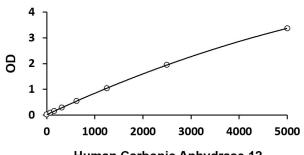
Highlight Related products:

Carbonic Anhydrase antibodies; Carbonic Anhydrase ELISA Kits;

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Cellular Localization Membrane; Single-pass type I membrane protein. [UniProt]

#### **Images**



Human Carbonic Anhydrase 12 concentration (pg/ml)

ARG82608 Human CA12 / Carbonic Anhydrase 12 ELISA Kit standard curve image

ARG82608 Human CA12 / Carbonic Anhydrase 12 ELISA Kit results of a typical standard run with optical density reading at 450 nm.