

## Product datasheet for **EA200026**

### Human CA12 ELISA Kit 1 x 96

#### Product data:

Product Type:	ELISA Kits
Description:	Human CA12 ELISA Kit 1 x 96
Size:	1 x 96 wells
Format:	8x12 divisible strips
Assay Type:	Sandwich
Assay Length:	3.5 hours incubations; 0.5 hour washing and analyzing samples
Signal:	Colorimetric
Curve Range:	78pg/ml-5000pg/ml
Sample Type:	Human serum, plasma and other biological fluids.
Sample Volume:	100µl
Specificity:	This kit is used for quantitative detection of Human CA12
Sensitivity:	26pg/ml
Reactivity:	Human
Cross Reactivity:	There is no detectable cross-reactivity with other relevant proteins.
Interference:	No significant interference observed with available related molecules.
Components:	<ul style="list-style-type: none"><li>● CA12 Antibody Coated 96-well Plate in foil pouch with desiccant   1 plate</li><li>● Recombinant Human CA12 Standard (250ng/ml)   0.1 mL</li><li>● 100x Biotin conjugated CA12 Detection Antibody   0.12 mL</li><li>● 100x SA-HRP Conjugate   0.12 mL</li><li>● Assay Buffer   30 mL</li><li>● Sample Diluent 25 mL</li><li>● Wash Buffer Concentrate 20X   60 mL</li><li>● TMB Substrate   12 mL</li><li>● Stop Solution   12 mL</li><li>● Plate Sealer   3 pieces</li></ul>



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**Background:**

Carbonic anhydrase 12 (CA12) is an enzyme that in humans is encoded by the CA12 gene. 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. Loss of function mutations in the CA12 gene result in defects in fluids and carbonate secretions, which is involved in cystic fibrosis-like syndrome with normal cystic fibrosis transmembrane conductance regulator (CFTR) protein levels, pancreatitis, Sjögren's syndrome and Xerostomia or dry mouth syndrome. It has been shown that CA12 expression is associated with a better prognosis in an unselected series of invasive breast carcinoma patients. Moreover, serum CA12 levels have been found significantly higher in lung cancer patients than in healthy controls, supporting that CA12 may be a promising diagnostic marker for lung cancer.

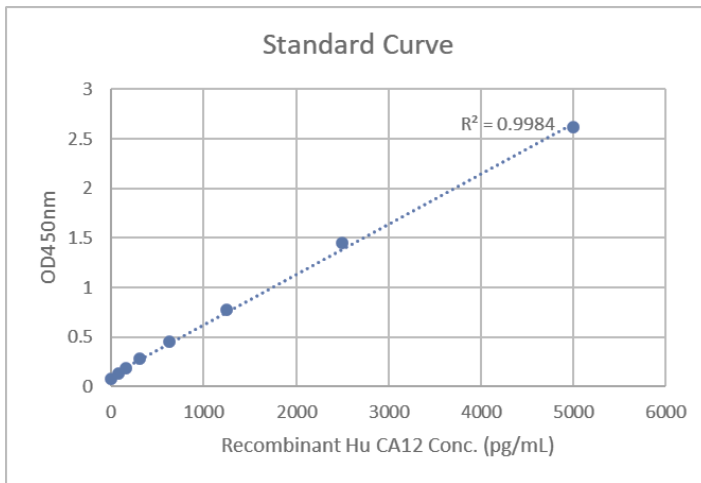
**Gene Symbol:**

CA12

**Gene ID:**

771

**Standard Curve:**
 Data image of Human CA12 ELISA Kit.

**Product images:**


Data image of Human CA12 ELISA Kit.