

Rat Carbonic anhydrase 2 (CA2) ELISA Kit

Catalog No: #EK11318



Package Size: #EK11318-1 48T #EK11318-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Rat Carbonic anhydrase 2 (CA2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	CA-II; CAII; Car2; carbonate dehydratase II carbonic anhydrase B carbonic dehydratase
Accession No.	P00919
Uniprot	P00919
GeneID	100009156;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.141 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate CA2 in samples. An antibody specific for CA2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyCA2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CA2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of CA2 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Carbonic anhydrase II (gene name CA2), is one of fourteen forms of humanacarbonic anhydrases. Carbonic anhydrase catalyzes reversible hydration of carbon dioxide. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis. Carbonic anhydrase II is expressed at high levels in osteoclasts during bone resorption. Laitala and Vaananen (1994) demonstrated in 2 in vitro culture systems that antisense RNA and DNA blocked expression of CA II and led to decreased bone resorption. In the choroid plexus, carbonic anhydrase II supports the transport of bicarbonate ions, sodium ions, and water from the blood to the cerebrospinal fluid.

Note: This product is for in vitro research use only