

REN

Human Prorenin ELISA Kit

Catalog No. CSI19824A Quantity: 1x96 tests

CSI19824B 5x96 tests

Description: Human Prorenin ELISA Kit is intended for the quantitative determination of Prorenin in

biological fluids. Active Renin will not be detected by this assay. Prorenin is measured

directly by ELISA without pretreatment of samples or conversion to Renin.

Principle: Human Prorenin will bind to the Capture Antibody coated on the microtiter plate. After

appropriate washing steps, Anti-Human Prorenin Primary Antibody binds to the captured protein. Only Prorenin and not active Renin will be detected by the Primary Antibody. Excess antibody is washed away and bound Primary Antibody is then reacted with the Secondary Antibody conjugated to Horseradish Peroxidase (HRP). TMB substrate is used for color development at 450 nm. A standard calibration curve is prepared along with the samples to be measured using dilutions of Prorenin. The amount of color development is directly proportional to the concentration of Prorenin in the sample.

Background: Renin (REN) catalyzes the first step in the Renin-Angiotensin System (RAS). REN

aspartyl protease, cleaves Angiotensinogen to form Angiotensin I, which is converted to Angiotensin II by Angiotensin I Converting Enzyme (ACE), an important regulator of blood pressure and electrolyte balance. Human REN is secreted by at least 2 cellular pathways: a constitutive pathway for the secretion of Prorenin and a regulated pathway

for the secretion of mature REN.

Alternate Names: Prorenin, Renin, Angiotensinogenase, Angiotensin-forming enzyme

GenelD: 5972

Range: The assay measures total Prorenin and Renin in the range of 0.01-10 ng/mL.

Incubation Time: 2 hours

Samples: Serum, plasma, urine, cell culture media, buffered solutions, or tissue extracts.

Cross-Reaction: Does not react with Mouse or Rat Prorenin

Reagents Included: 1. Microplate 96-wells coated with Capture Antibody

2. Wash Buffer Concentrate (10x)

3. Standards

4. Biotinylated Detection Antibody5. HRP-conjugated Secondary Antibody

6. TMB Substrate Reagent

Storage & Stability: Store at 2-8°C. Store unopened plate and any unused microtiter strips in the pouch with

desiccant. Reconstituted standards and primary antibody may be stored at -70°C for later use. DO NOT freeze/thaw the standards and primary antibody more than once. All other unused kit components must be stored at 4°C. Kit should be used no later than the

E-mail: <u>info@cellsciences.com</u>
Website: www.cellsciences.com

expiration date

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Toll Free: 888-769-1246

Phone: 781-828-0610

Fax: 781-828-0542