



# Dog Renin ELISA Kit

|                             |                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>         | CSB-E08704c                                                                                              |
| <b>Abbreviation</b>         | REN                                                                                                      |
| <b>Target Name</b>          | renin                                                                                                    |
| <b>Uniprot No.</b>          | Q6DYE7                                                                                                   |
| <b>Alias</b>                | FLJ10761, HNFJ2, angiotensin-forming enzyme angiotensinogenase renin precursor, renal                    |
| <b>Product Type</b>         | ELISA Kit                                                                                                |
| <b>Immunogen Species</b>    | Canis lupus familiaris (Dog) (Canis familiaris)                                                          |
| <b>Sample Types</b>         | serum, plasma, tissue homogenates                                                                        |
| <b>Detection Range</b>      | 62.5 pg/mL-4000 pg/mL                                                                                    |
| <b>Sensitivity</b>          | 15.6 pg/mL                                                                                               |
| <b>Assay Time</b>           | 1-5h                                                                                                     |
| <b>Sample Volume</b>        | 50-100ul                                                                                                 |
| <b>Detection Wavelength</b> | 450 nm                                                                                                   |
| <b>Lead Time</b>            | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx. |
| <b>Research Area</b>        | Cardiovascular                                                                                           |
| <b>Gene Names</b>           | REN                                                                                                      |
| <b>Tag Info</b>             | quantitative                                                                                             |
| <b>Protein Description</b>  | Sandwich                                                                                                 |

**Description**

This Dog REN ELISA Kit was designed for the quantitative measurement of Dog REN protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 62.5 pg/mL-4000 pg/mL and the sensitivity is 15.6 pg/mL.

**Target Details**

Renin catalyzes the first step in the activation pathway of angiotensinogen--a cascade that can result in aldosterone release, vasoconstriction, and increase in blood pressure. Renin, an aspartyl protease, cleaves angiotensinogen to form angiotensin I, which is converted to angiotensin II by angiotensin I converting enzyme, an important regulator of blood pressure and electrolyte balance. Transcript variants that encode different protein isoforms and that arise from alternative splicing and the use of alternative promoters have been described, but their full-length nature has not been determined. Mutations in this gene have been shown to cause familial hyperproreninemia.

**Product Precision**

Intra-assay Precision (Precision within an assay): CV%<8%  
Three samples of known concentration were tested twenty times on one plate to assess.



Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

## Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of dog renin in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

|     | Sample    | Serum(n=4) |
|-----|-----------|------------|
| 1:1 | Average % | 93         |
|     | Range %   | 89-97      |
| 1:2 | Average % | 105        |
|     | Range %   | 100-112    |
| 1:4 | Average % | 84         |
|     | Range %   | 80-88      |
| 1:8 | Average % | 95         |
|     | Range %   | 90-100     |

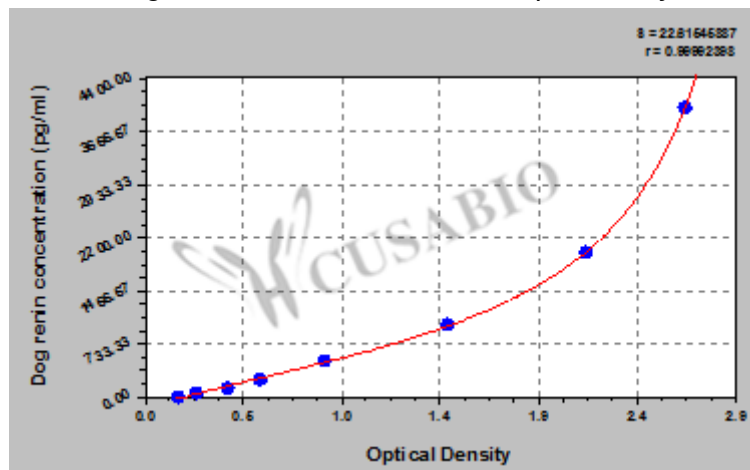
## Recovery

The recovery of dog renin spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range  |
|-------------------|--------------------|--------|
| Serum (n=5)       | 97                 | 90-103 |
| EDTA plasma (n=4) | 88                 | 84-93  |

## Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



| pg/ml | OD1   | OD2   | Average | Corrected |
|-------|-------|-------|---------|-----------|
| 4000  | 2.582 | 2.683 | 2.633   | 2.454     |
| 2000  | 2.204 | 2.104 | 2.154   | 1.975     |
| 1000  | 1.451 | 1.521 | 1.486   | 1.307     |
| 500   | 0.864 | 0.908 | 0.886   | 0.707     |
| 250   | 0.569 | 0.584 | 0.577   | 0.398     |
| 125   | 0.430 | 0.402 | 0.416   | 0.237     |
| 62.5  | 0.279 | 0.259 | 0.269   | 0.090     |
| 0     | 0.182 | 0.176 | 0.179   |           |

## Msds

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