



Rat angiotensinogen (aGT) ELISA Kit

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|----------------------|--|
| Product Code | CSB-E08565r |
| Abbreviation | AGT |
| Target Name | angiotensinogen (serpin peptidase inhibitor, clade A, member 8) |
| Uniprot No. | P01015 |
| Alias | ANHU, FLJ92595, FLJ97926, SERPINA8, alpha-1 antiproteinase, antitrypsin angiotensin I angiotensin II angiotensinogen pre-angiotensinogen serine (or cysteine) proteinase inhibitor |
| Product Type | ELISA Kit |
| Immunogen Species | Rattus norvegicus (Rat) |
| Sample Types | serum, plasma, tissue homogenates |
| Detection Range | 31.25 pg/mL-2000 pg/mL |
| Sensitivity | 7.81 pg/mL |
| Assay Time | 1-5h |
| Sample Volume | 50-100ul |
| Detection Wavelength | 450 nm |
| Lead Time | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx. |
| Research Area | Cardiovascular |
| Gene Names | Agt |
| Tag Info | quantitative |
| Protein Description | Sandwich |

Description

This Rat angiotensinogen (aGT) ELISA Kit is designed to measure the levels of Angiotensinogen, also known as Serpin A8, in samples from Rattus norvegicus (Rat). This quantitative assay uses a sandwich ELISA method, providing reliable and accurate measurements of aGT in serum, plasma, and tissue homogenates.

With a detection range of 31.25 pg/mL to 2000 pg/mL and a sensitivity of 7.81 pg/mL, this kit enables precise and accurate measurements of aGT levels in rat samples. The assay time ranges from 1 to 5 hours, requiring only 50-100ul of sample volume. The detection wavelength is at 450 nm.

This Rat angiotensinogen (aGT) ELISA Kit is ideal for researchers in the cardiovascular research area, looking to study the role of aGT in the regulation of blood pressure, fluid and electrolyte balance, and renal function. The kit provides an efficient, accurate, and reproducible method for the detection and measurement of aGT levels in rat samples. Additionally, this kit has been cited



in 3 publications, which demonstrates its reliability and usefulness in the field.

Target Details

This protein, pre-angiotensinogen or angiotensinogen precursor, is expressed in the liver and is cleaved by the enzyme renin in response to lowered blood pressure. The resulting product, angiotensin I, is then cleaved by angiotensin converting enzyme (ACE) to generate the physiologically active enzyme angiotensin II. The protein is involved in maintaining blood pressure and in the pathogenesis of essential hypertension and preeclampsia. Mutations in this gene are associated with susceptibility to essential hypertension, and can cause renal tubular dysgenesis, a severe disorder of renal tubular development. Defects in this gene have also been associated with non-familial structural atrial fibrillation, and inflammatory bowel disease.

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 rat aGT 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) |
|-------|-----------|------------|
| 1:100 | Average % | 107 |
| | Range % | 100-111 |
| 1:200 | Average % | 104 |
| | Range % | 97-108 |
| 1:400 | Average % | 90 |
| | Range % | 83-94 |
| 1:800 | Average % | 94 |
| | Range % | 85-97 |

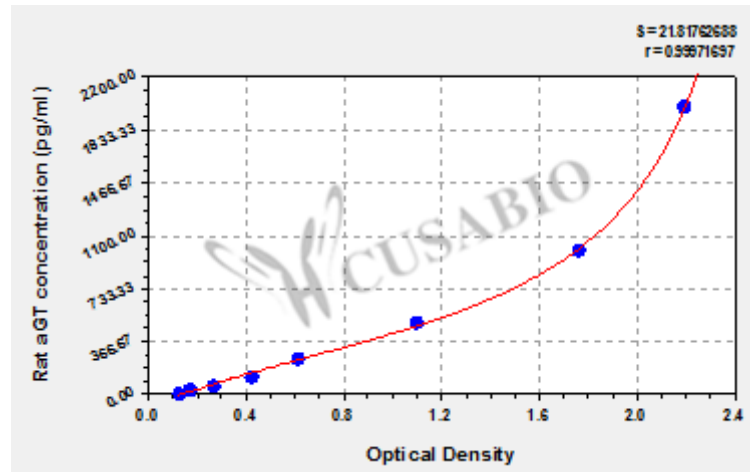
Recovery

The recovery of rat aGT 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) | 91 | 85-95 |
| EDTA plasma (n=4) | 101 | 93-104 |

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 |
|-------|-------|-------|---------|-----------|
| 2000 | 2.204 | 2.099 | 2.152 | 2.015 |
| 1000 | 1.744 | 1.713 | 1.729 | 1.592 |
| 500 | 1.098 | 1.067 | 1.083 | 0.946 |
| 250 | 0.605 | 0.617 | 0.611 | 0.474 |
| 125 | 0.431 | 0.421 | 0.426 | 0.289 |
| 62.5 | 0.277 | 0.266 | 0.272 | 0.135 |
| 31.25 | 0.175 | 0.181 | 0.178 | 0.041 |
| 0 | 0.138 | 0.136 | 0.137 | ? |

Msds

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