abcam

Product datasheet

Human Prorenin ELISA Kit ab157525

1 Image

Overview

Product name Human Prorenin ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
1	20	0.345ng/ml	0.02	5.74%
2	20	0.464ng/ml	0.017	3.61%
3	20	6.22ng/ml	0.237	3.81%

Inter-assay

Sample	n	Mean	SD	CV%
1	10	0.342ng/ml	0.045	13.2%
2	10	0.439ng/ml	0.056	12.6%
3	10	6.16ng/ml	0.353	5.72%

Sample type Plasma

Assay type Sandwich (quantitative)

Sensitivity 0.013 ng/ml

Range 0.02 ng/ml - 10 ng/ml

Recovery 99.75 %

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Human

Product overview Abcam's Prorenin ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for is for the quantitative determination of Prorenin in Human plasma. Active renin will not be detected by this assay. Prorenin is measured directly by ELISA without pre-treatment of samples or conversion to renin.

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. TMB substrate is used for color development at 450nm. 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.
Platform	Microplate

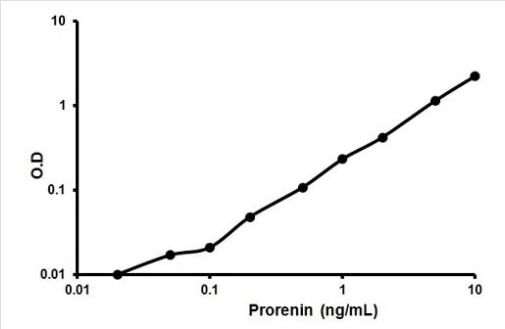
Properties

Storage instructions Please refer to protocols.

Components	1 x 96 tests
10X Wash Buffer	1 x 50ml
Anti-Human Prorenin antibody coated plates	1 unit
Anti-Human Prorenin Primary Antibody	1 vial
Anti-mouse HRP Secondary Antibody	1 vial
Human Prorenin Negative Control (0 ng)	2 vials
Human Prorenin Positive Control (20 ng)	1 vial
TMB Substrate Solution	1 x 10ml

Function	Renin is a highly specific endopeptidase, whose only known function is to generate angiotensin I from angiotensinogen in the plasma, initiating a cascade of reactions that produce an elevation of blood pressure and increased sodium retention by the kidney.
Involvement in disease	Defects in REN are a cause of renal tubular dysgenesis (RTD) [MIM:267430]. RTD is an autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the Potter phenotype). Defects in REN are the cause of familial juvenile hyperuricemic nephropathy type 2 (HNFJ2) [MIM:613092]. It is a renal disease characterized by juvenile onset of hyperuricemia, slowly progressive renal failure and anemia.
Sequence similarities	Belongs to the peptidase A1 family.
Cellular localization	Secreted. Membrane. Associated to membranes via binding to ATP6AP2.

Images



Typical Standard Cuve for ab157525 Prorenin Human ELISA

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