



Human Corin ELISA Kit

Product Code	CSB-E17447h
Abbreviation	CORIN
Target Name	corin, serine peptidase
Uniprot No.	Q9Y5Q5
Alias	ATC2, CRN, Lrp4, MGC119742, TMPRSS10, atrial natriuretic peptide-converting enzyme corin corin, serine protease heart specific serine proteinase pro-ANP-convertase pro-ANP-converting enzyme
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	0.625 ng/mL-40 ng/mL
Sensitivity	0.156 ng/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	CORIN
Tag Info	quantitative
Protein Description	Sandwich

Description

The human Corin ELISA Kit is used to quantitatively measure human Corin concentrations in serum, plasma, cell culture supernates, or tissue homogenates. It performs well in important characteristics, including sensitivity and specificity. This assay is based on the sandwich ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops proportionally to the amount of Corin in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

Corin is a type II transmembrane serine protease that is predominantly located in the heart where it converts pro-atrial natriuretic peptide (ANP) to mature ANP, stimulating natriuresis, diuresis, and vasodilation thus regulating sodium homeostasis and blood pressure. Corin variants that impair Corin function have been found in patients with hypertension, heart disease, pre-eclampsia, and kidney disease. Defects in Corin may contribute to major diseases such as hypertension, heart failure, pre-eclampsia, and kidney disease. Corin is identified as a potential biomarker for gestational hypertensive disorders.



Target Details

This gene encodes a member of the type II transmembrane serine protease class of the trypsin superfamily. Members of this family are composed of multiple structurally distinct domains. The encoded protein converts pro-atrial natriuretic peptide to biologically active atrial natriuretic peptide, a cardiac hormone that regulates blood volume and pressure. This protein may also function as a pro-brain-type natriuretic peptide convertase.

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 human Corin 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 %	87
	Range %	83-95
1:2	Average %	98
	Range %	94-102
1:4	Average %	102
	Range %	98-106
1:8	Average %	95
	Range %	90-100

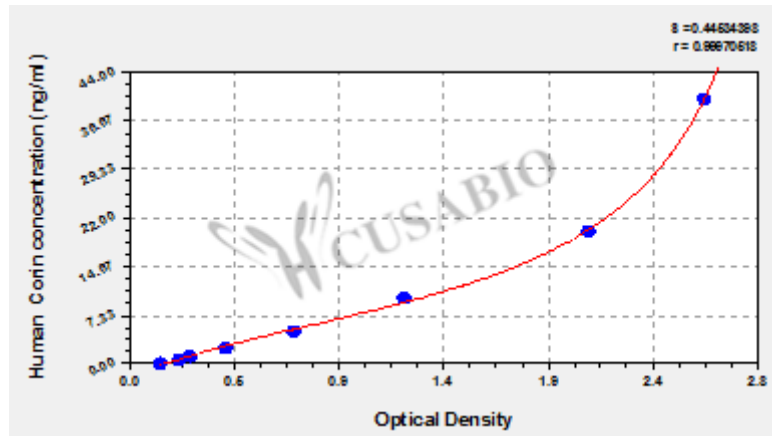
Recovery

The recovery of human Corin 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	85-104
EDTA plasma (n=4)	104	88-108

Typical

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



ng/ml	OD1	OD2	Average	Corrected
40	2.529	2.625	2.577	2.425
20	2.007	2.121	2.064	1.912
10	1.235	1.245	1.240	1.088
5	0.744	0.757	0.751	0.599
2.5	0.428	0.455	0.442	0.290
1.25	0.284	0.291	0.288	0.136
0.625	0.233	0.245	0.239	0.087
0	0.150	0.154	0.152	?

Msds

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