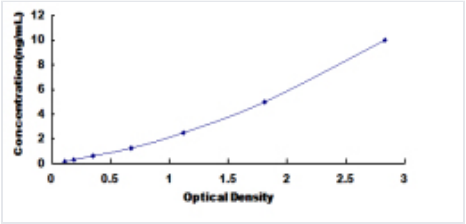
Corin (CRN) ELISA Kit for Rat

PRODUCT OVERVIEW

Product Name	Corin (CRN), ELISA Kit
Full Product Name	Rat Corin (CRN) ELISA Kit
Product Gene Name	CRN elisa kit
Product Synonym Names	ATC2; CRN; Lrp4; TMPRSS10; Atrial Natriuretic Peptide-Converting Enzyme, Serine Protease; Heart-specific serine proteinase ATC2; Pro-ANP-converting enzyme
Species Reactivity	Rat
Assay Type	Double-antibody Sandwich
Samples	Serum, Plasma, Tissue homogenates and other biological fluids
Detection Range	0.156-10ng/mL
Sensitivity	0.061ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of Corin (CRN). No significant cross-reactivity or interference between Corin (CRN) and analogues was observed.
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.
Molecular Weight	113,297 Da
OMIM	605236
3D Structure	ModBase 3D Structure for Q9Y5Q5
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Application	Enzyme-linked immunosorbent assay for Antigen Detection.
Intra-assay Precision (Precision within an assay)	3 samples with low, middle and high level Corin (CRN) were tested 20 times on one plate, respectively.
Inter-assay Precision (Precision between assays)	3 samples with low, middle and high level Corin (CRN) were tested on 3 different plates, 8 replicates in each plate.
CV(%) =	SD/meanX100
Intra-Assay	CV<10%
Inter-Assay	CV<12%
Product Categories/Family for CRN elisa kit	Enzyme & Kinase
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.

Related Product Information for CRN elisa kit	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Corin (CRN). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Corin (CRN). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Corin (CRN), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of Corin (CRN) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of CRN elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CRN purchase	MBS2023360 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Corin (CRN) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CRN. The ELISA analytical biochemical technique of the MBS2023360 kit is based on CRN antibody-CRN antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CRN antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CRN. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of CRN elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CRN. It may not necessarily be applicable to this product.

NCBI GI #	4884872
NCBI GeneID	10699
NCBI Accession #	AAD31850.1
UniProt Primary Accession #	Q9Y5Q5
UniProt Secondary Accession #	Q2TBD2; Q4W5E5; Q4W5G6; Q9UHY2; B0ZBE3
UniProt Related Accession #	Q9Y5Q5
NCBI Official Full Name	corin
NCBI Official Synonym Full Names	corin, serine peptidase
NCBI Official Symbol	CORIN
NCBI Official Synonym Symbols	CRN; ATC2; Lrp4; PEE5; TMPRSS10
UniProt Protein Name	Atrial natriuretic peptide-converting enzyme
UniProt Synonym Protein Names	Corin; Heart-specific serine proteinase ATC2; Pro-ANP-converting enzyme; Transmembrane protease serine 10
Protein Family	Inactive leucine-rich repeat receptor-like protein kinase
UniProt Gene Name	CORIN
UniProt Synonym Gene Names	CRN; TMPRSS10
UniProt Entry Name	CORIN_HUMAN

NCBI Protein Information	atrial natriuretic peptide-converting enzyme
NCBI Summary for CRN	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. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2013]
UniProt Comments for CRN	CORIN: Serine-type endopeptidase involved in atrial natriuretic peptide hormone (NPPA) processing. Converts through proteolytic cleavage the non-functional propeptide NPPA into the active hormone, thereby regulating blood pressure in heart and promoting natriuresis, diuresis and vasodilation. Proteolytic cleavage of pro-NPPA also plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus. Also acts as a regulator of sodium reabsorption in kidney. May also process pro-NPPB the B-type natriuretic peptide. Defects in CORIN are the cause of pre-eclampsia/eclampsia 5 (PEE5); also known as gestational proteinuric hypertension. Preeclampsia is a pregnancy-associated disease with maternal symptoms but placental origin. Unlike most other human disorders, it impacts 2 individuals, the mother and her child, both of whom can be severely affected. Belongs to the peptidase S1 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; EC 3.4.21.-; Protease; Cell surface Chromosomal Location of Human Ortholog: 4p12 Cellular Component: cell surface; integral to plasma membrane; extracellular region; plasma membrane; integral to membrane Molecular Function: serine-type endopeptidase activity Biological Process: regulation of blood pressure; peptide hormone processing; female pregnancy; proteolysis; regulation of systemic arterial blood pressure by atrial natriuretic peptide Disease: Preeclampsia/eclampsia 5
Research Articles on CRN	**1.** In conclusion, this is the first report of a highly significant association between these two single nucleotide polymorphisms in CORIN gene and preeclampsia.
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