ARG81545
Human Corin ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81545-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81545-002	Standard	2 X 10 ng/vial	4°C
ARG81545-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81545-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81545-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81545-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81545-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81545-008	25X Wash buffer	20 ml	4°C
ARG81545-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81545-010	STOP solution	10 ml (Ready to use)	4°C
ARG81545-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81545 Human Corin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Corin in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	Corin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	31.25 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	62.5 - 4000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 6.2% Inter-Assay CV: 6.9%
Alternate Names	Pro-ANP-converting enzyme; ATC2; Lrp4; Heart-specific serine proteinase ATC2; Transmembrane protease serine 10; Corin; TMPRSS10; EC 3.4.21.-; CRN; Atrial natriuretic peptide-converting enzyme; PEE5

Application Instructions

Assay Time	~ 5 hours

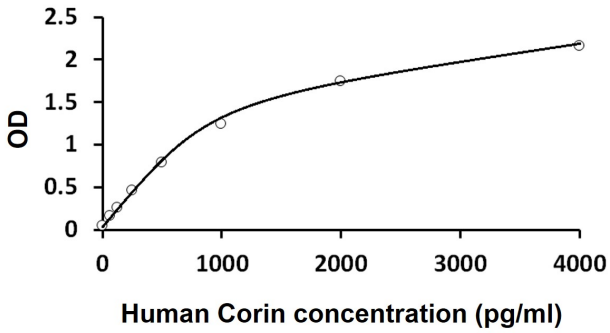
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CORIN
Gene Full Name	corin, serine peptidase
Background	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]
Function	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. Isoform 2: has weaker endopeptidase activity compared to isoform 1. [UniProt]
Highlight	Related products: New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	N-glycosylated; required for processing and activation. Activated through proteolytic processing by a trypsin-like protease; cleaved into a N-terminal propeptide and an activated corin protease fragment. Different soluble forms are produced by cleavage and autocatalytic cleavage: Atrial natriuretic peptide-converting enzyme, 180 kDa soluble fragment is produced by cleavage by ADAM10, while 160 kDa and 100 kDa soluble fragments are produced by autocatalytic cleavage. Cleavage by ADAM10 to produce soluble 180 kDa soluble fragment takes place after the transmembrane region and before FZ 1. A disulfide bond links the activated corin protease fragment and the N-terminal propeptide. The disulfide bond also links the activated corin protease fragment with soluble fragments (100 kDa, 160 kDa and 180 kDa fragments). [UniProt]

Images



ARG81545 Human Corin ELISA Kit standard curve image

ARG81545 Human Corin ELISA Kit results of a typical standard run with optical density reading at 450 nm.