

CORIN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6868c

Specification

CORIN Antibody (Center) - Product Information

Application WB,E
Primary Accession O9Y505

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 116486
Antigen Region 459-490

CORIN Antibody (Center) - Additional Information

Gene ID 10699

Other Names

Atrial natriuretic peptide-converting enzyme, 3421-, Corin, Heart-specific serine proteinase ATC2, Pro-ANP-converting enzyme, Transmembrane protease serine 10, Atrial natriuretic peptide-converting enzyme, N-terminal propeptide, Atrial natriuretic peptide-converting enzyme, activated protease fragment, Atrial natriuretic peptide-converting enzyme, 180 kDa soluble fragment, Atrial natriuretic peptide-converting enzyme, 160 kDa soluble fragment, Atrial natriuretic peptide-converting enzyme, 100 kDa soluble fragment, CORIN, CRN, TMPRSS10

Target/Specificity

This CORIN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 459-490 amino acids from the Central region of human CORIN.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CORIN Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CORIN Antibody (Center) - Protein Information



Name CORIN

Synonyms CRN, TMPRSS10

Function Serine-type endopeptidase involved in atrial natriuretic peptide (NPPA) and brain natriuretic peptide (NPPB) processing (PubMed:10880574, PubMed:21288900, PubMed:20489134, PubMed:21763278). Converts through proteolytic cleavage the non-functional propeptides NPPA and NPPB into their active hormones, ANP and BNP(1-32) respectively, thereby regulating blood pressure in the heart and promoting natriuresis, diuresis and vasodilation (PubMed:10880574, PubMed:21288900, PubMed:20489134, PubMed:21763278). Proteolytic cleavage of pro-NPPA also plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus (PubMed:22437503). Also acts as a regulator of sodium reabsorption in kidney (By similarity).

Cellular Location

Cell membrane; Single-pass type II membrane protein. Note=May easily detach from the endothelial cell membrane [Atrial natriuretic peptide-converting enzyme, 180 kDa soluble fragment]: Secreted. Note=Soluble form produced following cleavage by ADAM10 [Atrial natriuretic peptide-converting enzyme, 100 kDa soluble fragment]: Secreted. Note=Soluble form produced following autocatalytic cleavage

Tissue Location

Highly expressed in heart. Expressed in heart myocytes. Also expressed in pregnant uterus. Detected in blood, in plasma as well as in serum (at protein level)

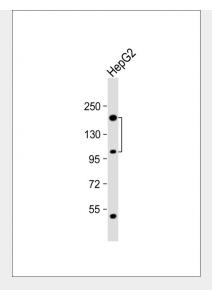
CORIN Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

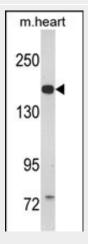
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CORIN Antibody (Center) - Images





Anti-CORIN Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 116 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of CORIN Antibody (Center) (Cat. #AP6868c) in mouse heart tissue lysates (35ug/lane). CORIN (arrow) was detected using the purified Pab.

CORIN Antibody (Center) - Background

CORIN is 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. This 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.

CORIN Antibody (Center) - References

Fox, A.A., et.al., Anesthesiology 110 (4), 738-747 (2009)