

# **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)

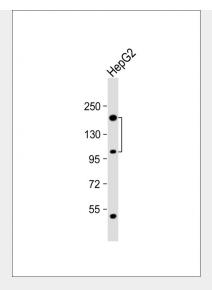
# **CORIN Antibody (Center) - Protocols**

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

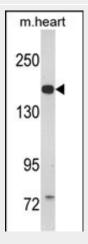
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **CORIN Antibody (Center) - Images**





Anti-CORIN Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ 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)