

CORIN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6868c

Product Information

Application WB, E
Primary Accession Q9Y5Q5

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB18116
Calculated MW 116486
Antigen Region 459-490

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 E~~Use at an assay dependent concentration.

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.

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: 20489134, PubMed: 21288900, 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: 20489134, PubMed: 21288900,

PubMed:<u>21763278</u>). Proteolytic cleavage of pro-NPPA also plays a role in female pregnancy by promoting trophoblast invasion and spiral artery remodeling in uterus (PubMed:<u>22437503</u>). 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)

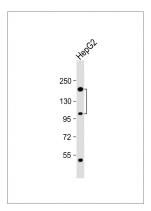
Background

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.

References

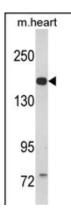
Fox, A.A., et.al., Anesthesiology 110 (4), 738-747 (2009)

Images



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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.