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CORIN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6868c

Product Information

Application	WB, E
Primary Accession	Q9Y5Q5
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
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: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)

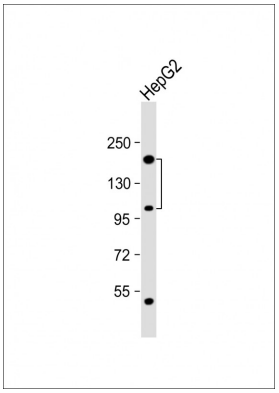
Background

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

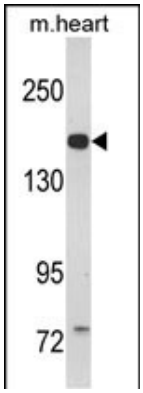
Fox,A.A., et.al., Anesthesiology 110 (4), 738-747 (2009)

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'.