

Corin (M-225): sc-67179

BACKGROUND

Corin, also designated atrial natriuretic peptide-converting enzyme, localizes to the membrane as a single-pass type II membrane protein. Corin acts as a serine protease that utilizes atrial and brain natriuretic peptides (ANP and BNP) as substrates, which play a role in blood coagulation, platelet activation, fibrinolysis and thrombosis. The extracellular domain of Corin contains two frizzled-like cysteine-rich domains, eight low density lipoprotein receptor (LDLR) repeats, a macrophage scavenger receptor-like domain and a Trypsin-like protease domain at the C-terminus. The frizzled-1 domain and LDLR repeats 1-4 are responsible for substrate recognition. Corin converts Pro-ANP to ANP by cleaving between Arginine 123 and Serine 124. Corin is highly expressed in cardiomyocytes, and mice deficient in the Corin protein exhibit hypertension and have cardiac hypertrophy.

REFERENCES

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2. Langenickel, T.H., et al. 2004. Rat Corin gene: molecular cloning and reduced expression in experimental heart failure. *Am. J. Physiol. Heart Circ. Physiol.* 287: H1516-H1521.
3. Tran, K.L., et al. 2004. Upregulation of Corin gene expression in myocardium. *Am. J. Physiol. Heart Circ. Physiol.* 287: H1625-H1631.
4. Chan, J.C., et al. 2005. Hypertension in mice lacking the proatrial natriuretic peptide convertase Corin. *Proc. Natl. Acad. Sci. USA* 102: 785-790.
5. Dries, D.L., et al. 2005. Corin gene minor allele defined by two missense mutations is common in blacks and associated with high blood pressure and hypertension. *Circulation* 112: 2403-2410.
6. Uchiyama, S. and Iijima, N. 2005. Partial purification and characterization of pro-phospholipase A2 activating proteases from gill membranes of the red sea bream, *Chrysophrys major*. *Comp. Biochem. Physiol. B, Biochem. Mol. Biol.* 141: 121-127.
7. Jiang, W., et al. 2005. Changes in production and metabolism of brain natriuretic peptide in rats with myocardial necrosis. *Eur. J. Pharmacol.* 507: 153-162.

CHROMOSOMAL LOCATION

Genetic locus: CORIN (human) mapping to 4p12; Corin (mouse) mapping to 5 C3.2.

SOURCE

Corin (M-225) is a rabbit polyclonal antibody raised against amino acids 136-360 mapping within a C-terminal extracellular domain of Corin of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Corin (M-225) is recommended for detection of Corin of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

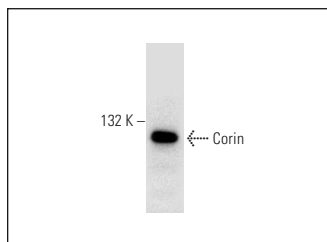
Suitable for use as control antibody for Corin siRNA (h): sc-60432, Corin siRNA (m): sc-60433, Corin shRNA Plasmid (h): sc-60432-SH, Corin shRNA Plasmid (m): sc-60433-SH, Corin shRNA (h) Lentiviral Particles: sc-60432-V and Corin shRNA (m) Lentiviral Particles: sc-60433-V.

Molecular Weight of Corin: 125-135 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Corin (M-225): sc-67179. Western blot analysis of Corin expression in HeLa whole cell lysate.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **Corin (5B6): sc-293360**, our highly recommended monoclonal alternative to Corin (M-225).