SANTA CRUZ BIOTECHNOLOGY, INC.

Corin (5B6): sc-293360

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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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4. 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.
5. Wu, Q., et al. 2005. Serine proteases and cardiac function. Biochim. Biophys. Acta 1751: 82-94.
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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.
8. Uchiyama, S. and Iijima, N. 2005. Partial purification and characterization of pro-phospholipas proteases from gill membranes of the red sea bream, *Chrysophrys major.* Comp. Biochem. Physiol. B, Biochem. Mol. Biol. 141: 121-127.

CHROMOSOMAL LOCATION

Genetic locus: CORIN (human) mapping to 4p12.

SOURCE

Corin (5B6) is a mouse monoclonal antibody raised against amino acids 616-715 of Corin of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Corin (5B6) is recommended for detection of Corin of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

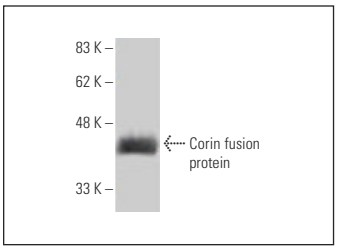
Suitable for use as control antibody for Corin siRNA (h): sc-60432, Corin shRNA Plasmid (h): sc-60432-SH and Corin shRNA (h) Lentiviral Particles: sc-60432-V.

Molecular Weight of Corin: 125-135 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Corin (5B6): sc-293360. Western blot analysis of human recombinant Corin fusion protein.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.