SANTA CRUZ BIOTECHNOLOGY, INC.

Conductin (M-20): sc-8570

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

β-catenin is a component of both the cadherin cell adhesion system and the Wnt signaling pathway. Wnt signaling increases the amount of β-catenin, by preventing its ubiquitination and degredation, allowing its direct interaction with transcription factors of the lymphoid enhancer factor-T cell factor family and modulation of gene expression. Axin is involved in the degradation of β-catenin by acting as a scaffold to form a complex between β-catenin, adenomatous polyposis coli (APC), and GSK-3β. APC, which is phosphorylated by GSK-3β, induces degradation of β-catenin, thus inhibiting Wnt signal transduction. Conductin is 45% identical to axin and appears to play a similar role to axin in the Wnt signaling pathway.

CHROMOSOMAL LOCATION

Genetic locus: AXIN2 (human) mapping to 17q24; Axin2 (mouse) mapping to 11 E1.

SOURCE

Conductin (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Conductin 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.

Blocking peptide available for competition studies, sc-8570 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Conductin (M-20) is recommended for detection of Conductin of mouse, rat and 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).

Conductin (M-20) is also recommended for detection of Conductin in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Conductin siRNA (h): sc-35087, Conductin siRNA (m): sc-35088, Conductin shRNA Plasmid (h): sc-35087-SH, Conductin shRNA Plasmid (m): sc-35088-SH, Conductin shRNA (h) Lentiviral Particles: sc-35087-V and Conductin shRNA (m) Lentiviral Particles: sc-35088-V.

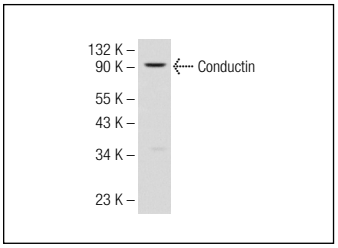
Molecular Weight of Conductin: 100 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, DU 145 nuclear extract: sc-24960 or SW480 cell lysate: sc-2219.

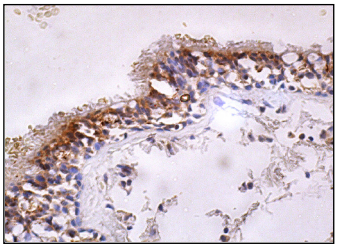
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Conductin (M-20): sc-8570. Western blot analysis of Conductin expression in Jurkat whole cell lysate.



Conductin (M-20): sc-8570. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

1. Calvisi, D.F., et al. 2001. Activation of β-catenin during hepatocarcinogenesis in transgenic mouse models: relationship to phenotype and tumor grade. Cancer Res. 61: 2085-2091.
2. Naishiro, Y., et al. 2005. Morphological and transcriptional responses of untransformed intestinal epithelial cells to an oncogenic β-catenin protein. Oncogene 24: 3141-3153.
3. Liu, X., et al. 2005. Rapid, Wnt-induced changes in GSK3β associations that regulate β-catenin stabilization are mediated by G_{α} proteins. Curr. Biol. 15: 1989-1997.
4. De Miglio, M.R., et al. 2007. Identification and chromosome mapping of loci predisposing to colorectal cancer that control Wnt/β-catenin pathway and progression of early lesions in the rat. Carcinogenesis 28: 2367-2374.
5. Ito, K., et al. 2008. RUNX3 attenuates β-catenin/T cell factors in intestinal tumorigenesis. Cancer Cell 14: 226-237.

RESEARCH USE

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