SANTA CRUZ BIOTECHNOLOGY, INC.

Conductin (C-6): sc-25302

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 17q24.1.

SOURCE

Conductin (C-6) is a mouse monoclonal antibody raised against amino acids 541-800 of Conductin of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Conductin (C-6) is available conjugated to agarose (sc-25302 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-25302 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-25302 PE), fluorescein (sc-25302 FITC), Alexa Fluor® 488 (sc-25302 AF488), Alexa Fluor® 546 (sc-25302 AF546), Alexa Fluor® 594 (sc-25302 AF594) or Alexa Fluor® 647 (sc-25302 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-25302 AF680) or Alexa Fluor® 790 (sc-25302 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

RESEARCH USE

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

APPLICATIONS

Conductin (C-6) is recommended for detection of Conductin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), 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), immunohistochemistry (including paraffin-embedded sections) (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 Conductin siRNA (h): sc-35087, Conductin shRNA Plasmid (h): sc-35087-SH and Conductin shRNA (h) Lentiviral Particles: sc-35087-V.

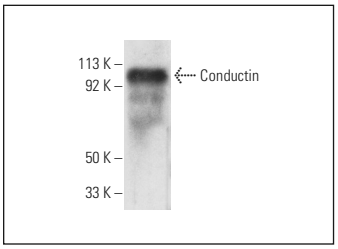
Molecular Weight of Conductin: 100 kDa.

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

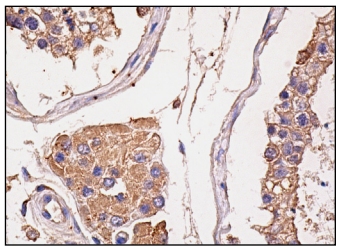
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Conductin (C-6): sc-25302. Western blot analysis of Conductin expression in SW480 whole cell lysate.



Conductin (C-6): sc-25302. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

SELECT PRODUCT CITATIONS

1. Hughes, T.A. and Brady, H.J.M. 2005. E2F1 up-regulates the expression of the tumour suppressor axin2 both by activation of transcription and by mRNA stabilisation. Biochem. Biophys. Res. Commun. 329: 1267-1274.
2. Hughes, T.A. and Brady, H.J.M. 2005. Expression of axin2 is regulated by the alternative 5'-untranslated regions of its mRNA. J. Biol. Chem. 280: 8581-8588.
3. Hughes, T.A. and Brady, H.J.M. 2006. Regulation of axin2 expression at the levels of transcription, translation, and protein stability in lung and colon cancer. Cancer Lett. 233: 338-347.
4. Zhang, Q., et al. 2021. P4HA1 regulates human colorectal cancer cells through HIF1α-mediated Wnt signaling. Oncol. Lett. 21: 145.

STORAGE

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

PROTOCOLS

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