

armadillo (H-7): sc-133181

BACKGROUND

Drosophila melanogaster is a proven and effective model for studying developmental and cellular processes common to higher eukaryotes. Approximately 13,600 genes have been elucidated from more than 120 megabases of euchromatin, and they are organized among the chromosomes 2, 3, 4, X and Y, with the Y chromosome being predominately heterochromatic. *Drosophila* genes can be categorized based on the type of protein for which they encode and are represented by six major classifications, which include intracellular signaling proteins, transmembrane proteins, RNA binding proteins, secreted factors, transcription regulators (basic helix-loop-helix, homeodomain-containing, zinc finger-containing and chromatin-associated) or other functional proteins. Among these proteins, APC (adenomatous polyposis coli) is a tumor suppressor that localizes to adherens junctions along with armadillo (*Drosophila* homolog of β -catenin) where they influence retinal fecundity, cell differentiation and programmed cell death.

REFERENCES

- Hayashi, S., Rubinfeld, B., Souza, B., Polakis, P., Wieschaus, E. and Levine, A.J. 1997. A *Drosophila* homolog of the tumor suppressor gene adenomatous polyposis coli downregulates β -catenin but its zygotic expression is not essential for the regulation of armadillo. *Proc. Natl. Acad. Sci. USA* 94: 242-247.
- Ahmed, Y., Hayashi, S., Levine, A. and Wieschaus, E. 1998. Regulation of armadillo by a *Drosophila* APC inhibits neuronal apoptosis during retinal development. *Cell* 93: 1171-1182.
- Adams, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P., et al. 2000. The genome sequence of *Drosophila melanogaster*. *Science* 287: 2185-2195.
- Townsend, F.M. and Bienz, M. 2000. Actin-dependent membrane association of a *Drosophila* epithelial APC protein and its effect on junctional armadillo. *Curr. Biol.* 10: 1339-1348.

SOURCE

armadillo (H-7) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of armadillo of *Drosophila melanogaster* origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

armadillo (H-7) is available conjugated to agarose (sc-133181 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133181 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133181 PE), fluorescein (sc-133181 FITC), Alexa Fluor® 488 (sc-133181 AF488), Alexa Fluor® 546 (sc-133181 AF546), Alexa Fluor® 594 (sc-133181 AF594) or Alexa Fluor® 647 (sc-133181 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133181 AF680) or Alexa Fluor® 790 (sc-133181 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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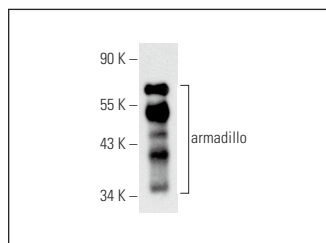
APPLICATIONS

armadillo (H-7) is recommended for detection of armadillo of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

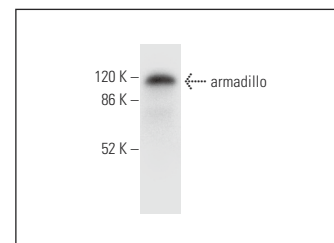
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



armadillo (H-7): sc-133181. Western blot analysis of *Drosophila* recombinant armadillo under reducing conditions.



armadillo (H-7): sc-133181. Western blot analysis of armadillo expression in Schneider's *Drosophila* Line 2 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.

PROTOCOLS

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