

# armadillo (C-9): sc-133180

## 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  $\beta$ -catenin) where they influence retinal fecundity, cell differentiation and programmed cell death.

## REFERENCES

- Hayashi, S., et al. 1997. A *Drosophila* homolog of the tumor suppressor gene adenomatous polyposis coli down-regulates  $\beta$ -catenin but its zygotic expression is not essential for the regulation of armadillo. Proc. Natl. Acad. Sci. USA 94: 242-247.
- Ahmed, Y., et al. 1998. Regulation of armadillo by a *Drosophila* APC inhibits neuronal apoptosis during retinal development. Cell 93:1171-1182.
- Adams, M.D., et al. 2000. The genome sequence of *Drosophila melanogaster*. Science 287: 2185-2195.
- Townsley, 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 (C-9) 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  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

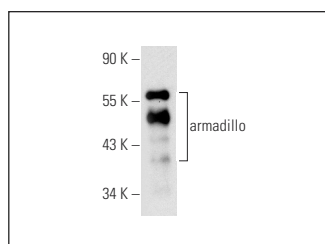
## APPLICATIONS

armadillo (C-9) 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  $\mu$ g per 100-500  $\mu$ 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 $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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 (C-9): sc-133180. Western blot analysis of *Drosophila* recombinant armadillo under reducing conditions.

## SELECT PRODUCT CITATIONS

- Agelopoulos, M., et al. 2012. Developmental regulation of chromatin conformation by Hox proteins in *Drosophila*. Cell Rep. 1: 350-359.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.