

armadillo (d-300): sc-28653

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., et al. 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., 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.
- 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.
- The Interactive Fly. <http://sdb.bio.purdue.edu/fly/aimain/1aahome.htm>.
<http://sdb.bio.purdue.edu/fly/aimain/6biochem.htm>

SOURCE

armadillo (d-300) is a rabbit polyclonal 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

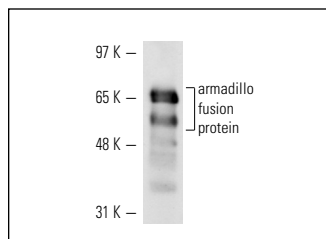
APPLICATIONS

armadillo (d-300) is recommended for detection of armadillo of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, 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 SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



armadillo (d-300): sc-28653. Western blot analysis of *Drosophila* recombinant armadillo fusion protein.

SELECT PRODUCT CITATIONS

- Wang, W., et al. 2011. Role of JAK/STAT signaling in neuroepithelial stem cell maintenance and proliferation in the *Drosophila* optic lobe. *Biochem. Biophys. Res. Commun.* 410: 714-720.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **armadillo (H-7): sc-133181** or **armadillo (F-6): sc-365793**, our highly recommended monoclonal alternatives to armadillo (d-300).