SANTA CRUZ BIOTECHNOLOGY, INC.

armadillo (F-6): sc-365793

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. 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.
2. 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.
3. 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.
4. 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 (F-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 39-67 near the N-terminus of armadillo of *Drosophila melanogaster* 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.

Blocking peptide available for competition studies, sc-365793 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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.

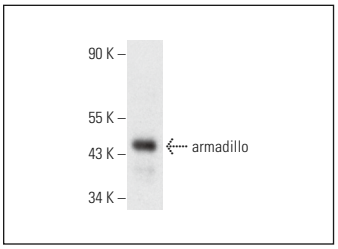
APPLICATIONS

armadillo (F-6) 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 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).

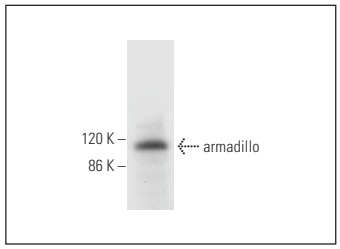
RECOMMENDED SUPPORT REAGENTS

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.

DATA



armadillo (F-6): sc-365793. Western blot analysis of full length *Drosophila* recombinant armadillo under non-reducing conditions.



armadillo (F-6): sc-365793. Western blot analysis of armadillo expression in Schneider's *Drosophila* Line 2 whole cell lysate.

PROTOCOLS

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