SANTA CRUZ BIOTECHNOLOGY, INC.

PARP L (dE-17): sc-27032

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. Poly ADP-ribose polymerase (PARP) binds to DNA strand, breaks and transfers ADP-ribose residues from NAD^+ to acceptor proteins and to ADP-ribosyl protein adducts. *Drosophila* encodes a full length PARP protein (PARP I, PARP L) and a truncated PARP protein (PARP II, PARP S) that lacks an automodification domain necessary for enzymatic activity.

REFERENCES

1. Miwa, M., Hanai, S., Poltronieri, P., Uchida, M., and Uchida, K. 1999. Functional analysis of poly ADP-ribose polymerase in *Drosophila melanogaster*. Mol. Cell. Biochem. 193: 103-107.
2. Lankenau, S., Burkle, A., and Lankenau, D.H. 1999. Detection of poly ADP-ribose synthesis in *Drosophila* testes upon γ-irradiation. Chromosoma 108: 44-51.
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: 2185-2295.
4. Uchida, M., Hanai, S., Uematsu, N., Sawamoto, K., Okano, H., Miwa, M., and Uchida, K. 2001. Genetic and functional analysis of PARP, a DNA strand break-binding enzyme. Mutat. Res. 477: 89-96.
5. The Interactive Fly. http://www.sdbonline.org/fly/aimain/1aahome.htm http://www.sdbonline.org/fly/aimain/6biochem.htm

SOURCE

PARP L (dE-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PARP L of *Drosophila melanogaster* origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27032 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PARP L (dE-17) is recommended for detection of PARP long isoform of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.