SANTA CRUZ BIOTECHNOLOGY, INC.

rat thymus extract: sc-2401

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Santa Cruz Biotechnology, Inc. offers a range of mammalian organ tissue protein extracts for use in combination with research antibodies as Western blotting controls. Human *(Homo sapiens)*, mouse *(Mus musculus)*, and rat *(Rattus norvegicus)* whole tissue extracts are derived from normal, healthy, and non-diseased tissue specimens. Mouse and rat animals are maintained under controlled conditions, and determined in good health by DVM. Human cadaver tissue via patient consent, are with infectious disease and serological testing. Whole tissue extraction preparation methodology (RIPA Lysis Buffer System (sc-24948)) ensures both protein integrity, and lot-to-lot reproducibility. Tissue extracts are tested by western blotting in order to ensure, that each preparation contains a consistent concentration and assortment of proteins.

SOURCE

rat thymus extract is derived from normal, healthy rat thymus tissue.

PRODUCT

Each vial contains 500 µg protein in 200 µl of an SDS-PAGE Western Blotting buffer, which consists of 100 µl RIPA Lysis Buffer (sc-24948) and 100 µl Electrophoresis Sample Buffer, 2X (sc-24945).

APPLICATIONS

rat thymus extract is provided as a Western Blotting positive control. Recommended use is 50 µg (20 µl) per lane. Tissue extract vial should be placed at 95º C for 3- 5 minutes once prior to use.

PREPARATION METHOD

Frozen tissues are reduced to a granular powder using a mechanical tissue grinder. Tissues are then suspended in a lysis solution (RIPA Lysis Buffer System (sc-24948)), and undergo sonication. Insoluble cellular debris removal is performed by centrifugation. The tissue extraction is adjusted to contain 500 µg of total cellular protein in 100 µl before adding an equal 100 µl volume of Electrophoresis Sample Buffer, 2X (sc-24945). Final concentration of product is 500 µg total protein in a final volume of 200 µl.

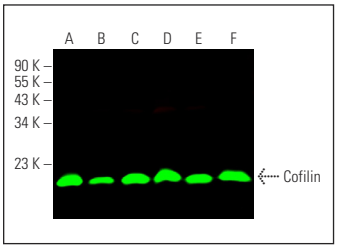
STORAGE

Store at -20° C, avoid repeated freeze/thaw cycles. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

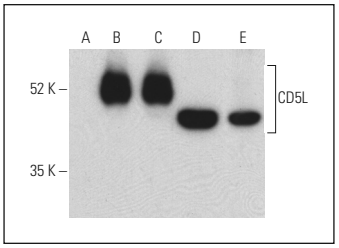
RESEARCH USE

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

DATA



Cofilin (E-8) Alexa Fluor® 680: sc-376476 AF680. Direct near-infrared western blot analysis of Cofilin expression in NIH/3T3 (**A**), HeLa (**B**), Jurkat (**C**), K-562 (**D**) and SK-N-MC (**E**) whole cell lysates and rat thymus tissue extract (**F**). Blocked with UltraCruz® Blocking Reagent: sc-516214.



CD5L (D-11): sc-390486. Western blot analysis of CD5L expression in non-transfected 293T: sc-117752 (**A**), mouse CD5L transfected 293T: sc-119114 (**B**), mouse CD5L transfected 293T: sc-119115 (**C**) and Jurkat (**D**) whole cell lysates and rat thymus tissue extract (**E**). Detection reagent used: m-IgGκ BP-HRP: sc-516102.

SELECT PRODUCT CITATIONS

1. Reuben, P.M., et al. 2004. Basic calcium phosphate crystals activate p44/42 MAPK signal transduction pathway via protein kinase Cmicro in human fibroblasts. J. Biol. Chem. 279: 35719-35725.
2. Adler, M., et al. 2009. Modulation of key regulators of mitosis linked to chromosomal instability is an early event in ochratoxin A carcinogenicity. Carcinogenesis 30: 711-719.
3. Beauséjour, A., et al. 2007. Placental oxidative stress in a rat model of preeclampsia. Placenta 28: 52-58.

PROTOCOLS

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