

3T3-L1 Cell Lysate: sc-2243

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. 3T3-L1 Whole Cell Lysate is derived from the 3T3-L1 cell line using a procedure that ensures protein integrity and lot-to-lot reproducibility. All lysates are tested by Western Blotting to assure that each one contains the expected concentration and assortment of proteins. Numerous antibodies directed against a wide array of mammalian proteins are used to test each lysate.

L1 is a continuous substrain of 3T3 (Swiss albino) cell line, developed through clonal isolation. The cells undergo a pre-adipose-to-adipose-like conversion as they progress from a rapidly dividing to a confluent and contact inhibited state. A high serum content in the medium enhances fat accumulation. This cell line expresses the insulin receptor. Tested and found negative for ectromelia virus (mousepox).

REFERENCES

1. Goodrum, F.D., et al. 1996. Adenovirus early region 4 34-kilodalton protein directs the nuclear localization of the early region 1B 55-kilodalton protein in primate cells. *J. Virol.* 70: 6323-6335.
2. Scherer, P.E., et al. 1996. Identification, sequence, and expression of caveolin-2 defines a caveolin gene family. *Proc. Natl. Acad. Sci. USA* 93: 131-135.
3. Kallen, C.B. and Lazar, M.A. 1996. Antidiabetic thiazolidinediones inhibit leptin (ob) gene expression in 3T3-L1 adipocytes. *Proc. Natl. Acad. Sci. USA* 93: 5793-5796.

SOURCE

3T3-L1 Whole Cell Lysate is derived from the 3T3-L1 cell line.

Organism: *Mus musculus* (mouse)
Tissue: Embryo
Cell Type: Fibroblast
Growth Properties: Adherent

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 and 100 µl Electrophoresis Buffer, 2X.

APPLICATIONS

3T3-L1 Whole Cell Lysate is provided as a Western Blotting positive control. Recommended use is 50 µg (20 µl) per lane. Sample vial should be boiled once prior to use.

STORAGE

Store at -20°C; stable for one year from the date of shipment. Non-hazardous. No MSDS required. Minimize repeated freezing and thawing.

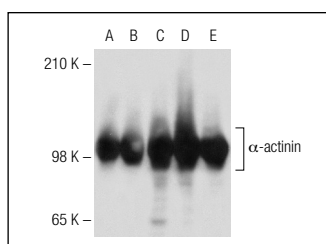
RESEARCH USE

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

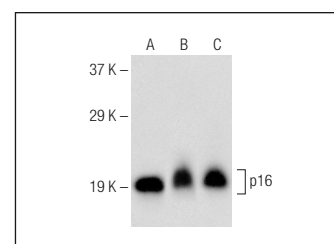
PREPARATION METHOD

Cells are cultured with appropriate media conditions and allowed to reach a confluency of 75%. Cells are lysed using the RIPA Lysis Buffer System (sc-24948). The BCA Protein Assay Kit (sc-202389) is used to determine the total protein concentration. The lysate is adjusted to contain 500 µg of total cellular protein in 100 µl before adding an equal volume of Electrophoresis Sample Buffer, 2X (sc-24945). Final concentration of product is 500 µg total protein in a final volume of 200 µl.

DATA



α-actinin (C-20): sc-7454. Western blot analysis of α-actinin expression in HeLa (A), K-562 (B), L8 (C), Sol8 (D) and 3T3-L1 (E) whole cell lysates.



p16 (F-4): sc-74401. Western blot analysis of p16 expression in 3T3-L1 (A), MM-142 (B) and mouse fibroblast (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Simpson, D.S., et al. 2009. Retinoblastoma family proteins have distinct functions in pulmonary epithelial cells *in vivo* critical for suppressing cell growth and tumorigenesis. *Cancer Res.* 69: 8733-8741.
2. Sassoon, C.S., et al. 2011. Interactive effects of corticosteroid and mechanical ventilation on diaphragm muscle function. *Muscle Nerve* 43: 103-111.

PROTOCOLS

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