

NIH/3T3 Whole Cell Lysate: sc-2210

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. NIH/3T3 Whole Cell Lysate is derived from the NIH/3T3 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.

The NIH/3T3 cell line is highly sensitive to sarcoma virus focus formation and leukemia virus propagation and has proven to be very useful in DNA transfection studies. Tested and found negative for ectromelia virus (mousepox).

REFERENCES

1. Shisler, J., et al. 1996. Induction of susceptibility to tumor necrosis factor by E1A is dependent on binding to either p300 or p105-Rb and induction of DNA synthesis. *J. Virol.* 70: 68-77.
2. Cavanaugh, V.J., et al. 1996. Murine cytomegalovirus with a deletion of genes spanning HindIII-J and -I displays altered cell and tissue tropism. *J. Virol.* 70: 1365-1374.
3. Westerman, K.A. and Leboulch, P. 1996. Reversible immortalization of mammalian cells mediated by retroviral transfer and site-specific recombination. *Proc. Natl. Acad. Sci. USA* 93: 8971-8976.

SOURCE

NIH/3T3 Whole Cell Lysate is derived from the NIH/3T3 cell line.

Organism: *Mus musculus* (mouse)
Strain: NIH/Swiss
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

NIH/3T3 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.

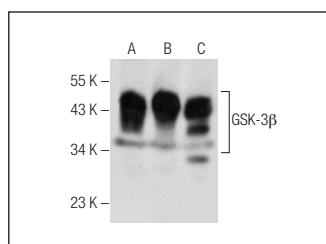
PROTOCOLS

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

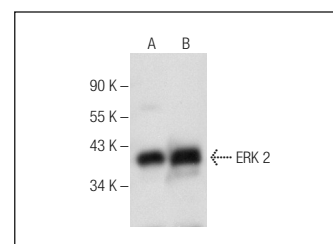
PREPARATION METHOD

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



GSK-3β (E-11): sc-377213. Western blot analysis of GSK-3β expression in HeLa (A), Jurkat (B) and NIH/3T3 (C) whole cell lysates.



ERK 2 (C-8): sc-271458. Western blot analysis of ERK 2 expression in A-431 (A) and NIH/3T3 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Hunter, R.B., et al. 2002. Activation of an alternative NFκB pathway in skeletal muscle during disuse atrophy. *FASEB J.* 16: 529-538.
2. Wu, T., et al. 2003. Light-induced photoreceptor degeneration may involve the NFκB/caspase-1 pathway *in vivo*. *Brain Res.* 967: 19-26.
3. Thomas, M.A. and Lemmer, B. 2006. The use of heat-induced hydrolysis in immunohistochemistry on angiotensin II (AT₁) receptors enhances the immunoreactivity in paraformaldehyde-fixed brain tissue of normotensive Sprague-Dawley rats. *Brain Res.* 1119: 150-164.
4. Rocconi, R.P., et al. 2008. Expression of C-kit and platelet-derived growth factor receptors in ovarian granulosa cell tumors. *Reprod. Sci.* 15: 673-677.
5. Ohno, Y., et al. 2009. Annexin II represents metastatic potential in clear-cell renal cell carcinoma. *Br. J. Cancer* 101: 287-294.
6. Wang, J., et al. 2009. Genistein mechanisms and timing of prostate cancer chemoprevention in lobund-wistar rats. *Asian Pac. J. Cancer Prev.* 10: 143-150.
7. Ma, Y., et al. 2010. Maternal obesity and overnutrition alter fetal growth rate and cotyledonary vascularity and angiogenic factor expression in the ewe. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 299: R249-R258.
8. Han, S.S., et al. 2010. NFκB/STAT3/PI3K signaling crosstalk in iMyc E µ B lymphoma. *Mol. Cancer* 9: 97.
9. Fukamachi, S., et al. 2011. Topical cholecystokinin depresses itch-associated scratching behavior in mice. *J. Invest. Dermatol.* 131: 956-961.

RESEARCH USE

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