SANTA CRUZ BIOTECHNOLOGY, INC.

SCC-4 Whole Cell Lysate: sc-364363

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. HeLa Whole Cell Lysate is derived from the HeLa 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. HeLa is the oldest and most commonly used human cell line. SCC-4 was derived from a human squamous cell carcinoma (SCC) of the tongue from a 55-year-old male. SCC-4 cells have been reported to form colonies in semi-solid medium, and are not induced to differentiate by anchorage deprivation. Growth is enhanced by use of a feeder layer of 3T3 swiss cells.

REFERENCES

1. Rheinwald, J.G. and Beckett, M.A. 1980. Defective terminal differentiation in culture as a consistent and selectable character of malignant human keratinocytes. Cell 22: 629-632.
2. Rheinwald, J.G. and Beckett, M.A. 1981. Tumorigenic keratinocyte lines requiring anchorage and fibroblast support cultured from human squamous cell carcinomas. Cancer Res. 41: 1657-1663.

SOURCE

SCC-4 Whole Cell Lysate is derived from human tongue squamous carcinoma.

Organism:	*Homo sapiens* (human)
Tissue:	Tongue
Disease:	Squamous carcinoma
Cell Type:	Epithelial-like
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

SCC-4 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.

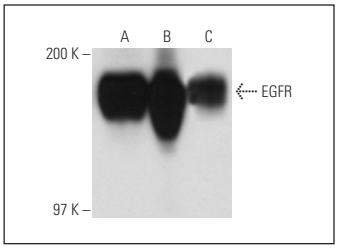
PROTOCOLS

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

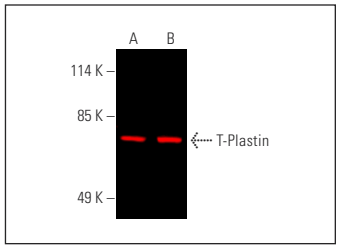
PREPARATION METHOD

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



EGFR (F4): sc-53274. Western blot analysis of EGFR expression in untreated A-431 (**A**), EGF treated A-431 (**B**) and SCC-4 (**C**) whole cell lysates.



T-Plastin (A-3): sc-166208. Near-infrared western blot analysis of T-Plastin expression in HeLa (**A**) and SCC-4 (**B**) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 790: sc-516181.

RESEARCH USE

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