SANTA CRUZ BIOTECHNOLOGY, INC.

MIA PaCa-2 Cell Lysate: sc-2285

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. MIA PaCa-2 Whole Cell Lysate is derived from the MIA PaCa-2 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 MIA PaCa-2 cell line was established by A. Yunis, et al. in 1975 from tumor tissue of the pancreas obtained from a 65 year old Caucasian male. Cellular products include human colony stimulating factor, subclass I (CSF-I) and plasminogen activator.

REFERENCES

1. Wu, M., Arimura, G.K. and Yunis, A.A. 1977. Purification and characterization of a plasminogen activator secreted by cultured human pancreatic carcinoma cells. Biochemistry 16: 1908-1913.
2. Yunis, A.A., Arimura, G.K. and Russin, D.J. 1977. Human pancreatic carcinoma (MIA PaCa-2) in continuous culture: sensitivity to asparaginase. Int. J. Cancer 19: 128-135.
3. Fountzilas, G., Gratzner, H., Lim, L.O. and Yunis, A.A. 1986. Comparative effects of selected drug combinations on the growth of a human pancreatic carcinoma cell line (MIA PaCa-2). J. Natl. Cancer Inst. 76: 37-43.
4. Robertson, J.F., Watson, S.A. and Hardcastle, J.D. 1995. Effect of gastrointestinal hormones and synthetic analogues on the growth of pancreatic cancer. Int. J. Cancer 63: 69-75.

SOURCE

MIA PaCa-2 Whole Cell Lysate is derived from the MIA PaCa-2 cell line.

Organism:	*Homo sapiens* (human)
Organ:	Pancreas
Disease:	Carcinoma
Growth Properties:	Adherent epithelial, single rounded cells and loosely attached floating clusters

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

MIA PaCa-2 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.

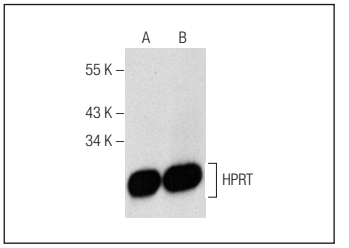
STORAGE

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

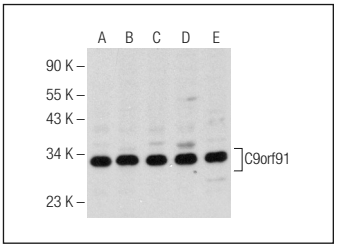
PREPARATION METHOD

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



HPRT (A-10): sc-376559. Western blot analysis of HPRT expression in A549 (**A**) and MIA PaCa-2 (**B**) whole cell lysates.



C9orf91 (V-12): sc-138875. Western blot analysis of C9orf91 expression in MOLT-4 (**A**), Caco-2 (**B**), Jurkat (**C**), MIA PaCa-2 (**D**) and BJAB (**E**) whole cell lysates.

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.