SANTA CRUZ BIOTECHNOLOGY, INC.

MDA-MB-435S Whole Cell Lysate: sc-364184

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. MDA-MB-435S Whole Cell Lysate is derived from the MDA-MB-435S 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 MDA-MB-435S cell line was originally described as a spindle shaped variant of the parental MDA-MB-435 strain isolated in 1976 by R. Cailleau, et al. from the pleural effusion of a 31 year old female with metastatic, ductal adenocarcinoma of the breast. However, recent studies have generated questions about the origin of the parent cell line, MDA-MB-435, and by extension HTB-129. Gene expression analysis of the cells produced microarrays in which MDA-MB-435 clustered with cell lines of melanoma origin instead of breast. Additional studies have since corroborated a melanocyte origin of MDA-MB-435. The cell line to which MDA-MB-435 is reported to have been cross-contaminated with is the M14 melanoma line.

REFERENCES

1. Cailleau, R., Olivé, M. and Cruciger, Q.V. 1978. Long-term human breast carcinoma cell lines of metastatic origin: preliminary characterization. In Vitro 14: 911-915.
2. Siciliano, M.J., Barker, P.E. and Cailleau, R. 1979. Mutually exclusive genetic signatures of human breast tumor cell lines with a common chromosomal marker. Cancer Res. 39: 919-922.
3. Brinkley, B.R., Beall, P.T., Wible, L.J., Mace, M.L., Turner, D.S. and Cailleau, R.M. 1980. Variations in cell form and cytoskeleton in human breast carcinoma cells *in vitro.* Cancer Res. 40: 3118-3129.

SOURCE

MDA-MB-435S Whole Cell Lysate is derived from the MDA-MB-435S cell line.

Organism:	*Homo sapiens* (human)
Tissue:	Breast
Disease:	Previously described as ductal carcinoma
Morphology:	Spindle shaped
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

MDA-MB-435S 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.

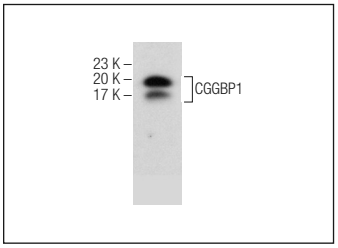
RESEARCH USE

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

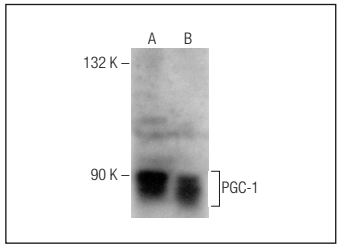
PREPARATION METHOD

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



CGGBP1 (FL-167): sc-292517. Western blot analysis of CGGBP1 expression in MDA-MB-435S whole cell lysate.



PGC-1 (H-300): sc-13067. Western blot analysis of PGC-1 expression in MDA-MB-435S (**A**) and Hep G2 (**B**) whole cell lysates.

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.