

NCI-H292 Whole Cell Lysate: sc-364179

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. NCI-H292 Whole Cell Lysate is derived from the NCI-H292 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 NCI-H292 cell line was derived from a lymph node metastasis of a pulmonary mucoepidermoid carcinoma. The cells were isolated in a chemically defined medium (HITES) and later adapted to growth in media supplemented with serum. The cells retain their mucoepidermoid characteristics in culture as determined by their ultrastructure and expression of multiple markers of squamous differentiation. NCI-H292 cells support the growth of hepatitis B virus and are negative for L-DOPA decarboxylase. The line has been selected as a prototype for transfecting human subgenomic fragments into human cells for studying the role of HBV and its individual genes in the pathogenesis of viral hepatitis and liver cancer. NCI-H292 cells stain positive for keratin and vimentin and are mucicarmine positive but are negative for neurofilament triplet protein.

REFERENCES

1. Yoakum, G.H., Korba, B.E., Lechner, J.F., Tokiwa, T., Gazdar, A.F., Seeley, T., Siegel, M., Leeman, L., Autrup, H. and Harris, C.C. 1983. High-frequency transfection and cytopathology of the hepatitis B virus core antigen gene in human cells. *Science* 222: 385-389.
2. Banks-Schlegel, S.P., Gazdar, A.F. and Harris, C.C. 1985. Intermediate filament and cross-linked envelope expression in human lung tumor cell lines. *Cancer Res.* 45: 1187-1197.
3. Carney, D.N., Gazdar, A.F., Bepler, G., Guccion, J.G., Marangos, P.J., Moody, T.W., Zweig, M.H. and Minna, J.D. 1985. Establishment and identification of small cell lung cancer cell lines having classic and variant features. *Cancer Res.* 45: 2913-2923.

SOURCE

NCI-H292 Whole Cell Lysate is derived from the NCI-H292 cell line.

Organism: *Homo sapiens* (human)
 Tissue: Lung
 Disease: Mucoepidermoid pulmonary carcinoma
 Cell Type: Epithelial
 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.

STORAGE

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

APPLICATIONS

NCI-H292 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.

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.

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.