

LNCaP Whole Cell Lysate: sc-2231

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. LNCaP Whole Cell Lysate is derived from the LNCaP 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. LNCaP clone FGC was isolated in 1977 by J.S. Horoszewicz, et al., from a needle aspiration biopsy of the left supraclavicular lymph node of a 50 year old Caucasian male (blood type B+) with confirmed diagnosis of metastatic prostate carcinoma. These cells are responsive to 5- α -dihydrotestosterone (growth modulation and acid phosphatase production).

REFERENCES

1980. Models for prostate cancer. New York: Liss, 37.
- Horoszewicz, J.S., et al. 1983. LNCaP model of human prostatic carcinoma. *Cancer Res.* 43: 1809-1818.
- Gibas, Z., et al. 1984. A high-resolution study of chromosome changes in a human prostatic carcinoma cell line (LNCaP). *Cancer Genet. Cytogenet.* 11: 399-404.

SOURCE

LNCaP Whole Cell Lysate is derived from the LNCaP cell line.

Organism: *Homo sapiens* (human)
 Organ: Prostate
 Disease: Carcinoma
 Cell Type: Epithelial
 Growth Properties: Adherent, single cells and loosely attached clusters

PRODUCT

Each vial contains 500 μ g protein in 200 μ l of an SDS-PAGE Western Blotting buffer, which consists of 100 μ l RIPA Lysis Buffer and 100 μ l Electrophoresis Buffer, 2X.

APPLICATIONS

LNCaP Whole Cell Lysate is provided as a Western Blotting positive control. Recommended use is 50 μ g (20 μ l) per lane. Sample vial should be boiled once prior to use.

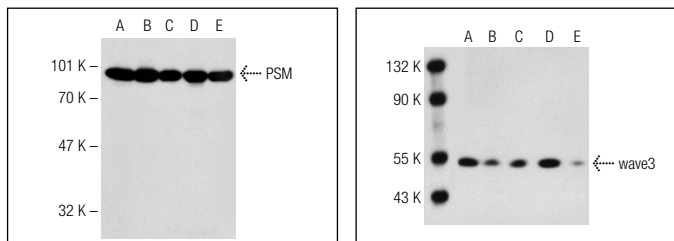
PREPARATION METHOD

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 μ g of total cellular protein in 100 μ l before adding an equal volume of Electrophoresis Sample Buffer, 2X (sc-24945). Final concentration of product is 500 μ g total protein in a final volume of 200 μ l.

STORAGE

Store at -20 $^{\circ}$ C; stable for one year from the date of shipment. Non-hazardous. No MSDS required. Minimize repeated freezing and thawing.

DATA



PSM (k1H7): sc-130546. Western blot analysis of PSM expression in LNCaP (A), DU 145 (B), AT-3 (C), Hep G2 (D) and Caki-1 (E) whole cell lysates.

wave3 (G-20): sc-26500. Western blot analysis of wave3 expression in MCF7 (A), MDA-MB-231 (B), DU 145 (C), LNCaP (D) and ES-2 (E) whole cell lysates.

SELECT PRODUCT CITATIONS

- Gatson, J.W., et al. 2006. Dihydrotestosterone differentially modulates the mitogen-activated protein kinase and the phosphoinositide 3-kinase/Akt pathways through the nuclear and novel membrane androgen receptor in C6 cells. *Endocrinology* 147: 2028-2034.
- 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.
- Vingren, J.L., et al. 2009. Effect of resistance exercise on muscle steroid receptor protein content in strength-trained men and women. *Steroids* 74: 1033-1039.

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.