

# HeLa Whole Cell Lysate: sc-2200

## 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. The line was derived from cervical cancer cells taken in February 1951 from a 30 year old African-American female. The cell line was found to be remarkably durable and prolific as illustrated by its contamination of many other cell lines used in research. HeLa cells are positive for keratin by immunoperoxidase staining and have been reported to contain human papilloma virus 18 (HPV-18) sequences. p53 expression was reported to be low, and normal levels of pRB (retinoblastoma suppressor) were found.

## REFERENCES

1. Vanderzant, C. and Splittstoesser, D. 1992. Compendium of Methods for the Microbiological Examination of Foods, 3rd ed. Washington, DC: American Public Health Association.
2. Cunniff, P.A., ed. 1995. Invasiveness of mammalian cells by *Escherichia coli*: Microbiological method. Sec. 17.4.02, Method 982.36. In Official Methods of Analysis of AOAC International, 16th ed. Gaithersburg, MD: AOAC International, 22-24.
3. Baldi, A., et al. 1996. Genomic structure of the human retinoblastoma-related Rb2/p130 gene. Proc. Natl. Acad. Sci. USA 93: 4629-4632.

## SOURCE

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

Organism:	<i>Homo sapiens</i> (human)
Tissue:	Cervix
Disease:	Adenocarcinoma
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.

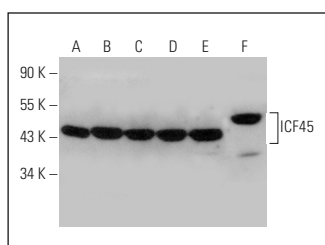
## APPLICATIONS

HeLa 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.

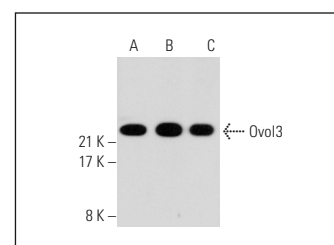
## PREPARATION METHOD

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.

## DATA



ICF45 (Q-13): sc-162954. Western blot analysis of ICF45 expression in HeLa (A), Jurkat (B), K-562 (C), Hep G2 (D), NIH/3T3 (E) and U251-MG (F) whole cell lysates.



Ovol3 (C-15): sc-248191. Western blot analysis of Ovol3 expression in HeLa (A), Jurkat (B) and K-562 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Sreekumar, P.G., et al. 2009. Regulation of thioredoxin by ceramide in retinal pigment epithelial cells. Exp. Eye Res. 88: 410-417.
2. Gyorgy, A.B., et al. 2010. Reverse phase protein microarray technology in traumatic brain injury. J. Neurosci. Methods 192: 96-101.
3. Myren, M., et al. 2012. Prostaglandin E2 receptor expression in the rat trigeminal-vascular system and other brain structures involved in pain. Neurosci. Lett. 506: 64-69.
4. Goonetilleke, U.R., et al. 2012. Death is associated with complement C3 depletion in cerebrospinal fluid of patients with pneumococcal meningitis. MBio. E-Published.
5. García-Posadas, L., et al. 2012. Hyaluronan receptors in the human ocular surface: a descriptive and comparative study of RHAMM and CD44 in tissues, cell lines and freshly collected samples. Histochem. Cell Biol. 137: 165-176.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.