SANTA CRUZ BIOTECHNOLOGY, INC.

HeLa + IFN-γ Cell Lysate: sc-2222



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

- Vanderzant, C., et al. 1992. Compendium of methods for the microbiological examination of foods, 3rd ed. Washington, DC: American Public Health Association.
- Cunniff, P.A., et al. 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 retinoblastomarelated 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.

APPLICATIONS

HeLa + IFN- γ 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 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.

DATA





ZNF852 (N-20): sc-102667. Western blot analysis of ZNF852 expression in HeLa (A), PMA treated HeLa (B), IFN $_{\rm T}$ treated HeLa (C) and UV treated HeLa (D) whole cell lysates.

IL-18BP (PL-B12): sc-134364. Western blot analysis of IL-18BP expression in K-562 (A), MCF7 (B), HeLa (C), U-698-M (D) and IFN $_{\gamma}$ treated HeLa (E) whole cell lysates

SELECT PRODUCT CITATIONS

- Wang, X.M., et al. 2007. Rofecoxib modulates multiple gene expression pathways in a clinical model of acute inflammatory pain. Pain 128: 136-147.
- Teofili, L., et al. 2008. Epigenetic alteration of SOCS family members is a possible pathogenetic mechanism in JAK2 wild type myeloproliferative diseases. Int. J. Cancer. 123: 1586-1592.
- Johnson, K.B., et al. 2012. Vena cava and aortic smooth muscle cells express transglutaminases 1 and 4 in addition to transglutaminase 2. Am. J. Physiol. Heart Circ. Physiol. 302: H1355-H1366.

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.