

# HL-60 Whole Cell Lysate: sc-2209

## BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. HL-60 Whole Cell Lysate is derived from the HL-60 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.

HL-60 is a promyelocytic cell line derived by S.J. Collins, et al. Peripheral blood leukocytes were obtained by leukopheresis from a 36 year old Caucasian female with acute promyelocytic leukemia. HL-60 cells spontaneously differentiate, and differentiation can be stimulated by butyrate, hypoxanthine, phorbol myristic acid (PMA, TPA), dimethylsulfoxide (DMSO, 1-1.5%), actinomycin D or retinoic acid. The cells exhibit phagocytic activity and responsiveness to chemotactic stimuli. The line is positive for Myc oncogene expression.

## REFERENCES

- Collins, S.J., et al. 1977. Continuous growth and differentiation of human myeloid leukaemic cells in suspension culture. *Nature* 270: 347-349.
- Collins, S.J., et al. 1978. Terminal differentiation of human promyelocytic leukemia cells induced by dimethyl sulfoxide and other polar compounds. *Proc. Natl. Acad. Sci. USA* 75: 2458-2462.
- Gallagher, R., et al. 1979. Characterization of the continuous, differentiating myeloid cell line (HL-60) from a patient with acute promyelocytic leukemia. *Blood* 54: 713-733.

## SOURCE

HL-60 Whole Cell Lysate is derived from the HL-60 cell line.

Organism: *Homo sapiens* (human)  
Organ: Peripheral blood  
Disease: Acute promyelocytic leukemia  
Growth Properties: Suspension

## 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

HL-60 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.

## STORAGE

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

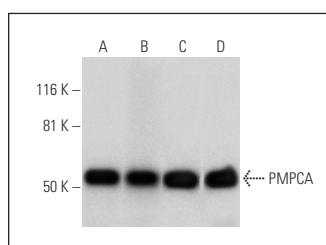
## RESEARCH USE

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

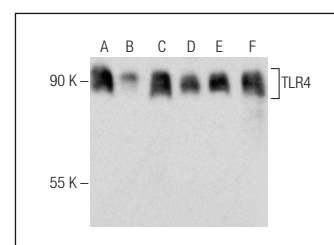
## PREPARATION METHOD

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



PMPCA (F-4): sc-390718. Western blot analysis of PMPCA expression in MCF7 (A), SK-BR-3 (B), K-562 (C) and HL-60 (D) whole cell lysates.



TLR4 (M-300): sc-30002. Western blot analysis of TLR4 expression in Jurkat (A), HEL 92.1.7 (B), HL-60 (C), AML-193 (D), CCRF-CEM (E) and JAR (F) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Gupte, S.A., et al. 2005. Cytosolic NADPH may regulate differences in basal Nox oxidase-derived superoxide generation in bovine coronary and pulmonary arteries. *Am. J. Physiol. Heart Circ. Physiol.* 288: H13-H21.
- Lokeshwar, V.B., et al. 2006. HYAL1-v1, an alternatively spliced variant of HYAL1 hyaluronidase: a negative regulator of bladder cancer. *Cancer Res.* 66: 11219-11227.
- Rubie, C., et al. 2006. Chemokine expression in hepatocellular carcinoma versus colorectal liver metastases. *World J. Gastroenterol.* 12: 6627-6633.
- Oliveira Frick, V., et al. 2011. Changes in CXCL12/CXCR4-chemokine expression during onset of colorectal malignancies. *Tumour Biol.* 32: 189-196.
- Rubie, C., et al. 2011. Effect of preoperative FOLFOX chemotherapy on CCL20/CCR6 expression in colorectal liver metastases. *World J. Gastroenterol.* 17: 3109-3116.
- Rubie, C., et al. 2011. CXC receptor-4 mRNA silencing abrogates CXCL12-induced migration of colorectal cancer cells. *J. Transl. Med.* 9: 22.

## PROTOCOLS

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