

MOLT-4 Cell Lysate: sc-2233

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. MOLT-4 Whole Cell Lysate is derived from the MOLT-4 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.

MOLT-4 cell line was established from a 19 year old male. The line was established from cells taken from a patient in relapse. The patient had received prior multidrug chemotherapy. There is a G→A mutation at codon 248 of the p53 gene. p53 is not expressed. The cells do not produce immunoglobulin or Epstein-Barr virus. This cell line produces high levels of terminal deoxynucleotidyl transferase (TdT).

REFERENCES

1. Minowada, J., Onuma, T. and Moore, G.E. 1972. Rosette-forming human lymphoid cell lines. I. Establishment and evidence for origin of thymus-derived lymphocytes. *J. Natl. Cancer Inst.* 49: 891-895.
2. Ohsugi, Y., Gershwin, M.E., Owens, R.B. and Nelson-Rees, W.A. 1980. Tumorigenicity of human malignant lymphoblasts: comparative study with unmanipulated nude mice, antilymphocyte serum-treated nude mice, and X-irradiated nude mice. *J. Natl. Cancer Inst.* 65: 715-718.
3. Mertelsmann, R., Gillis, S., Steinmann, G., Ralph, P., Stiehm, M., Koziner, B. and Moore, M.A. 1981. T-cell growth factor (interleukin 2) and terminal transferase activity in human leukemias and lymphoblastic cell lines. *Blut.* 43: 99-103.

SOURCE

MOLT-4 Cell Lysate is derived from the MOLT-4 cell line.

Organism: *Homo sapiens* (human)
Disease: Acute lymphoblastic leukemia
Cell Type: T lymphoblast
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

MOLT-4 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.

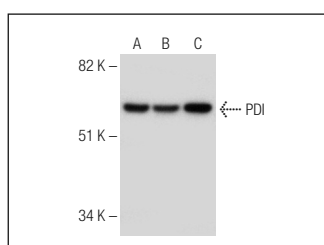
STORAGE

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

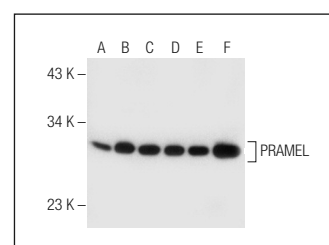
PREPARATION METHOD

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



PDI (C-5): sc-376369. Western blot analysis of PDI expression in MOLT-4 (A), Raji (B) and A2058 (C) whole cell lysates.



PRAMEL (D-17): sc-248302. Western blot analysis of PRAMEL expression in HeLa (A), HS 181.Tes (B), NTERA-2 cl.D1 (C), Jurkat (D), WI 38 (E) and MOLT-4 (F) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Brender, C., Nielsen, M., Kaltoft, K., Mikkelsen, G., Zhang, Q., Wasik, M., Billestrup, N. and Odum, N. 2001. STAT3-mediated constitutive expression of SOCS-3 in cutaneous T-cell lymphoma. *Blood* 97: 1056-1062.

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.