SANTA CRUZ BIOTECHNOLOGY, INC.

TF-1 Cell Lysate: sc-2412

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Santa Cruz Biotechnology Inc. offers whole cell lysates for use in combination with research antibodies as Western Blotting controls. TF-1 cells are a human bone marrow derived erythroblast-like myeloid progenitor isolated in 1987 from a 35-year-old Asian (Japanese) male exhibiting a profile of depleted platelets, erythrocytes and white blood cells (pancytopenia). TF-1 Cell Lysate is derived from cultured suspension TF-1 cells, using a preparation method (RIPA Lysis Buffer System (sc-24948), that ensures protein integrity and lot-to-lot reproducibility. Whole cell lysates are tested by Western Blotting in order to ensure each preparation contains a consistent concentration, and assortment of proteins.

REFERENCES

1. Drexler, H.G. and Quentmeier, H. 1996. Thrombopoietin: expression of its receptor MPL and proliferative effects on leukemic cells. Leukemia 10: 1405-1421.
2. Testa, U., et al. 1998. Terminal megakaryocytic differentiation of TF-1 cells is induced by phorbol esters and thrombopoietin and is blocked by expression of PML/RARα fusion protein. Leukemia 12: 563-570.
3. Miura, Y., et al. 2001. Adhesion via CD43 induces Syk activation and cell proliferation in TF-1 cells. Biochem. Biophys. Res. Commun. 288: 80-86.
4. Lin, K.R., et al. 2007. Survival factor withdrawal-induced apoptosis of TF-1 cells involves a TRB2-Mcl-1 axis-dependent pathway. J. Biol. Chem. 282: 21962-21972.

SOURCE

TF-1 Cell Lysate is derived from the TF-1 cell line.

Organism:	*Homo sapiens* (human)
Source:	Age 35, male, Asian (Japanese)
Tissue of Origin:	Bone marrow / erythroleukemia
Cell Type:	Erythroblast like myeloid progenitor
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

TF-1 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.

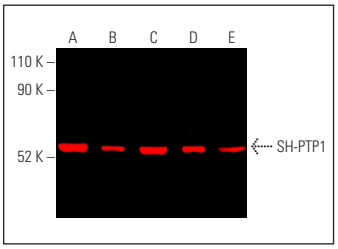
PREPARATION METHOD

TF-1 suspension cells are cultured with appropriate media conditions. Cells are lysed using the RIPA Lysis Buffer System (sc-24948). BCA Protein Assay 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.

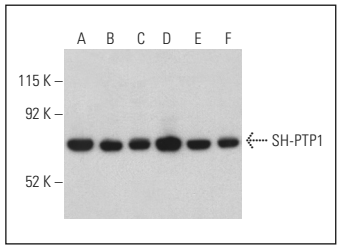
STORAGE

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

DATA



SH-PTP1 (D-11): sc-7289. Near-Infrared western blot analysis of SH-PTP1 expression in HL-60 (**A**), U-937 (**B**), HEL 92.1.7 (**C**), TF-1 (**D**) and CCRF-CEM (**E**) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG$_3$ BP-CFL 790: sc-533678.



SH-PTP1 (D-11): sc-7289. Western blot analysis of SH-PTP1 expression in HEL 92.1.7 (**A**), TF-1 (**B**), CCRF-CEM (**C**), HL-60 (**D**), U-937 (**E**) and Raji (**F**) whole cell lysates. Detection reagent used: m-IgG$_3$ BP-HRP: sc-533670.

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.