SANTA CRUZ BIOTECHNOLOGY, INC.

NTERA-2 cl.D1 Whole Cell Lysate: sc-364181

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. NTERA-2 cl.D1 Whole Cell Lysate is derived from the NTERA-2 cl.D1 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.

The NTERA-2 cl.D1 cell line is a pluripotent human testicular embryonal carcinoma cell line derived by cloning the NTERA-2 cell line. The parental NTERA-2 line was established in 1980 from a nude mouse xenograft of the Tera-2 cell line. This clone differentiates along neuroectodermal lineages after exposure to retinoic acid (RA) or hexamethylene bisacetamide (HMBA). The RA-induced differentiation is characterized by glycolipid changes, appearance of neurons,and induction of homeobox (HOX) gene clusters. The cells exhibit high expression of N-Myc oncogene activity.

REFERENCES

1. Fenderson, B.A., Andrews, P.W., Nudelman, E., Clausen, H. and Hakomori, S. 1987. Glycolipid core structure switching from globo- to lacto- and ganglio-series during retinoic acid-induced differentiation of TERA-2-derived human embryonal carcinoma cells. Dev. Biol. 122: 21-34.
2. Andrews, P.W. 1988. Human teratocarcinomas. Biochim. Biophys. Acta 948: 17-36.
3. Mavilio, F., Simeone, A., Boncinelli, E. and Andrews, P.W. 1988. Activation of four homeobox gene clusters in human embryonal carcinoma cells induced to differentiate by retinoic acid. Differentiation 37: 73-79.

SOURCE

NTERA-2 cl.D1 Whole Cell Lysate is derived from the NTERA-2 cl.D1 cell line.

Organism:	*Homo sapiens* (human)
Tissue:	Testis
Disease:	Malignant pluripotent embryonal carcinoma
Cell Type:	Epithelial-like, differentiation changes phenotype
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

NTERA-2 cl.D1 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.

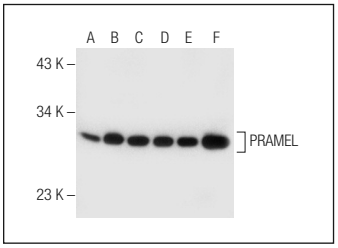
STORAGE

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

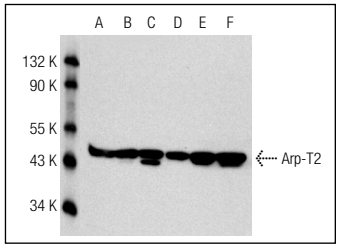
PREPARATION METHOD

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



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.



Arp-T2 (NB82): sc-130487. Western blot analysis of Arp-T2 expression in Hep G2 (**A**), NTERA-2 cl.D1 (**B**), A-673 (**C**), K-562 (**D**), MIA PaCa-2 (**E**) and DU 145 (**F**) whole cell lysates.

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.