

HEK293 Whole Cell Lysate: sc-45136

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. HEK293 Whole Cell Lysate is derived from the HEK293 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.

Although an earlier report suggested that HEK293 cells contained adenovirus 5 DNA from both the right and left ends of the viral genome, it is now clear that only left end sequences are present. HEK293 cells express an unusual cell surface receptor for vitronectin composed of the Integrin $\beta 1$ subunit and the vitronectin receptor αV subunit. The Ad5 insert was cloned and sequenced, and it was determined that a colinear segment from nts 1-4344 is integrated into chromosome 19 (19q13.2). HEK293 is excellent for titrating human adenoviruses.

REFERENCES

1. Graham, F.L., Smiley, J., Russell, W.C. and Nairn, R. 1977. Characteristics of a human cell line transformed by DNA from human adenovirus type 5. *J. Gen. Virol.* 36: 59-74.
2. Xie, Q.W., Leung, M., Fuortes, M., Sassa, S. and Nathan, C. 1996. Complement analysis of mutants of nitric oxide synthase reveals that the active site requires two hemes. *Proc. Natl. Acad. Sci. USA* 93: 4891-4896.
3. Da Costa, L.T., Jen, J., He, T.C., Chan, T.A., Kinzler, K.W. and Vogelstein, B. 1996. Converting cancer genes into killer genes. *Proc. Natl. Acad. Sci. USA* 93: 4192-4196.

SOURCE

HEK293 Whole Cell Lysate is derived from the HEK293 cell line.

Organism: *Homo sapiens* (human)
Tissue: Embryonic kidney
Cell Type: Epithelial
Growth Properties: Adherent

PRODUCT

Each vial contains 500 μ g protein in 200 μ l of an SDS-PAGE Western Blotting buffer, which consists of 100 μ l RIPA Lysis Buffer and 100 μ l Electrophoresis Buffer, 2X.

APPLICATIONS

HEK293 Whole Cell Lysate is provided as a Western Blotting positive control. Recommended use is 50 μ g (20 μ l) per lane. Sample vial should be boiled once prior to use.

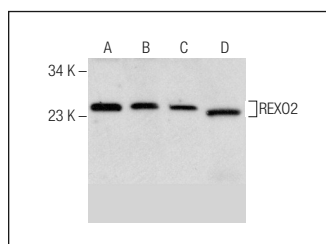
STORAGE

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

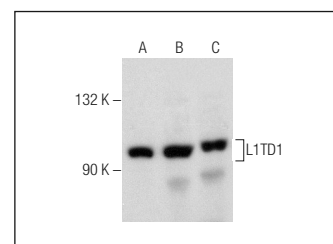
PREPARATION METHOD

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



REXO2 (A-12): sc-109424. Western blot analysis of REXO2 expression in HeLa nuclear extract (A) and K-562 (B), HEK293 (C) whole cell lysates and mouse liver tissue extract (D).



L1TD1 (C-14): sc-133376. Western blot analysis of L1TD1 expression in HeLa (A), HEK293 (B) and COLO 320DM (C) 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.