

HEK293T Whole Cell Lysate: sc-45137

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. HEK293T Whole Cell Lysate is derived from the HEK293T 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.

293T is a human embryonic kidney (HEK) cell line that expresses the large T antigen. The large T antigen is commonly used for transfection assays and is required for transient transfection of plasmids with an SV40 origin of replication. 293T cells are able to grow well in reduced serum medium or in medium lacking calcium ions. In addition, 293T cells tend to grow at a faster rate—and to a higher cell density—than the parent 293 cell line, resulting in increased amounts of endogenously expressed protein.

REFERENCES

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3. Fukazawa, H. and Masumi, A. 2012. The conserved 12-amino acid stretch in the inter-bromodomain region of BET family proteins functions as a nuclear localization signal. *Biol. Pharm. Bull.* E-published.
4. Jing, P., Zhang, J.Y., Ouyang, Q., Wu, J. and Zhang, X.J. 2012. Lithium treatment induces proteasomal degradation of over-expressed acetylcholinesterase (AChE-S) and inhibit GSK3 β . *Chem. Biol. Interact.* E-published.

SOURCE

HEK293T Whole Cell Lysate is derived from the HEK293T cell line.

Organism: *Homo sapiens* (human)
Tissue: Human embryonic kidney
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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

HEK293T 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.

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.

RESEARCH USE

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