SANTA CRUZ BIOTECHNOLOGY, INC.

ECV-304 Whole Cell Lysate: sc-2269

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. ECV-304 Whole Cell Lysate is derived from the ECV-304 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.

DNA profiling studies revealed that STR patterns of the endothelial line ECV-304 and the human bladder line T24 were very similar, suggesting that ECV-304 was a derivative of T24. Furthermore, karyotypes of the two lines show two shared-marker chromosomes. Thus, ECV-304 most probably is a derivative of T24, a line that was developed a couple of years earlier. It is important to emphasize that all stocks of ECV show similar properties. It is clear that the contamination took place before the cell banks independently received initial stocks. Independent laboratories have reported that ECV showed some biomarkers expected of endothelial cell lines, namely Factor VIII, tubule formation on Matrigel, and/or Weibel-Palade bodies. Studies to determine if T24 exhibits any such markers are underway.

REFERENCES

1. Takahashi, K., et al. 1990. Spontaneous transformation and immortalization of human endothelial cells. In Vitro Cell. Dev. Biol. 26: 265-274.
2. Takahashi, K. and Sawasaki, Y. 1991. Human endothelial cell line, ECV304, produces pro-urokinase [letter]. In Vitro Cell. Dev. Biol. 27A: 766-768.
3. Takahasi, K. and Sawasaki, Y. 1992. Rare spontaneously transformed human endothelial cell line provides useful research tool [letter]. In Vitro Cell. Dev. Biol. 28A: 380-382.

SOURCE

ECV-304 Whole Cell Lysate is derived from the ECV-304 cell line

Organism:	*Homo sapiens* (human)
Tissue:	Bladder
Disease:	Carcinoma
Cell type:	Epithelial
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

ECV-304 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.

SELECT PRODUCT CITATIONS

1. Kusama-Eguchi, K., et al. 2010. Hind-limb paraparesis in a rat model for neurolathyrism associated with apoptosis and an impaired vascular endothelial growth factor system in the spinal cord. J. Comp. Neurol. 518: 928-942.

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.