

# MES-SA/Dx5 Cell Lysate: sc-2284

## BACKGROUND

Santa Cruz Biotechnology, Inc. offers whole cell lysates for use in combination with research antibodies as Western Blotting controls. MES-SA/Dx5 Cell Lysate is derived from a multi drug-resistant human uterine sarcoma cell line. MES-SA/Dx5 lineage originates from the human uterine sarcoma cell line MES-SA. MES-SA epithelial cell lineage originates from a tumor identified within a 56-year-old caucasian female hysterectomy patient in 1980. The Dx5 variant of MES-SA exhibits ~100-fold doxorubicin resistance and ~30 hour doubling time. MES-SA/Dx5 cell lysate is derived from cultured MES-SA/Dx5 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. Wang, E., et al. 2000. Lysosomal accumulation of drugs in drug-sensitive MES-SA but not multidrug-resistant MES-SA/Dx5 uterine sarcoma cells. *J. Cell. Physiol.* 184: 263-274.
2. Wesolowska, O., et al. 2005. Human sarcoma cell lines MES-SA and MES-SA/Dx5 as a model for multidrug resistance modulators screening. *Anticancer Res.* 25: 383-389.
3. Hung, T.H., et al. 2014. FZD1 activates protein kinase C delta-mediated drug-resistance in multidrug-resistant MES-SA/Dx5 cancer cells. *Int. J. Biochem. Cell. Biol.* 53: 55-65.
4. Pósa, S.P., et al. 2022. Cytotoxicity of cinchona alkaloid organocatalysts against MES-SA and MES-SA/Dx5 multidrug-resistant uterine sarcoma cell lines. *Bioorg. Med. Chem.* 67: 116855.

## SOURCE

MES-SA/Dx5 lineage originates from the MES-SA cell line.

Organism: *Homo sapiens* (human)  
Source: Caucasian female  
Tissue of Origin: Uterus/hysterectomy/tumor  
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

MES-SA/Dx5 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

MES-SA/Dx5 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). 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.