SANTA CRUZ BIOTECHNOLOGY, INC.

Mesothelin (h2): 293T Lysate: sc-171058

BACKGROUND

Mesothelin is a glycosylphosphatidylinositol-linked cell-surface molecule expressed in the mesothelial lining of the body cavities and in many tumor cells. Mesothelin is a tumor antigen on the surface of human ovarian cancers and mesotheliomas. Mesothelin immunoreactivity is high in cancers of the ovary (serous papillary, endometrioid and undifferentiated) and pancreas, with less frequent staining seen in adenocarcinomas of the endometrium, lung and stomach/esophagus. In adult mouse tissues the Mesothelin transcript is present in lung, heart, spleen, liver, kidney and testis.

REFERENCES

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2. Chowdhury, P.S., Chang, K. and Pastan, I. 1997. Isolation of anti-Mesothelin antibodies from a phage display library. Mol. Immunol. 34: 9-20.
3. Hassan, R., Wu, C., Brechbiel, M.W., Margulies, I., Kreitman, R.J. and Pastan, I. 1999. 111Indium-labeled monoclonal antibody K1: biodistribution study in nude mice bearing a human carcinoma xenograft expressing Mesothelin. Int. J. Cancer 80: 559-563.
4. Bera, T.K. and Pastan, I. 2000. Mesothelin is not required for normal mouse development or reproduction. Mol. Cell. Biol. 20: 2902-2906.
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6. Rump, A., Morikawa, Y., Tanaka, M., Minami, S., Umesaki, N., Takeuchi, M. and Miyajima, A. 2004. Binding of ovarian cancer antigen CA125/MUC16 to Mesothelin mediates cell adhesion. J. Biol. Chem. 279: 9190-9198.

CHROMOSOMAL LOCATION

Genetic locus: MSLN (human) mapping to 16p13.3.

PRODUCT

Mesothelin (h2): 293T Lysate represents a lysate of human Mesothelin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Mesothelin (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Mesothelin antibodies. Recommended use: 10-20 µl per lane.

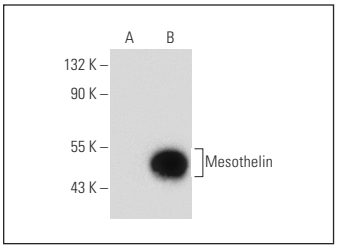
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Mesothelin (G-1): sc-271540 is recommended as a positive control antibody for Western Blot analysis of enhanced human Mesothelin expression in Mesothelin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

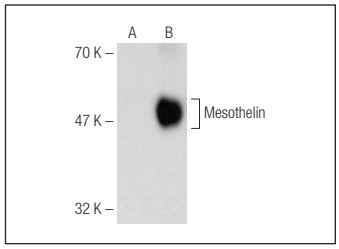
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Mesothelin (G-1): sc-271540. Western blot analysis of Mesothelin expression in non-transfected: sc-117752 (**A**) and human Mesothelin transfected: sc-171058 (**B**) 293T whole cell lysates.



Mesothelin (C-2): sc-365324. Western blot analysis of Mesothelin expression in non-transfected: sc-117752 (**A**) and human Mesothelin transfected: sc-171058 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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