

# Mesothelin (M-285): sc-50427

## 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

1. Chang, K., et al. 1996. Molecular cloning of mesothelin, a differentiation antigen present on mesothelium, mesotheliomas, and ovarian cancers. *Proc. Natl. Acad. Sci. USA* 93: 136-140.
2. Chowdhury, P.S., et al. 1997. Isolation of anti-mesothelin antibodies from a phage display library. *Mol. Immunol.* 34: 9-20.
3. Hassan, R., et al. 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., et al. 2000. Mesothelin is not required for normal mouse development or reproduction. *Mol. Cell. Biol.* 20: 2902-2906.

## CHROMOSOMAL LOCATION

Genetic locus: Msln (mouse) mapping to 17 A3.3.

## SOURCE

Mesothelin (M-285) is a rabbit polyclonal antibody raised against amino acids 291-575 mapping near the C-terminus of Mesothelin of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Mesothelin (M-285) is recommended for detection of Mesothelin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Mesothelin siRNA (m): sc-45387, Mesothelin shRNA Plasmid (m): sc-45387-SH and Mesothelin shRNA (m) Lentiviral Particles: sc-45387-V.

Molecular Weight of Mesothelin precursor: 69 kDa.

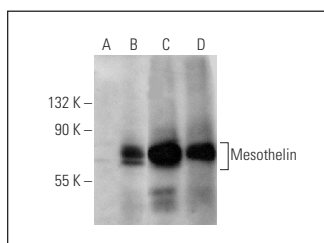
Molecular Weight of mature Mesothelin: 40 kDa.

Positive Controls: Mesothelin (m): 293T Lysate: sc-121605, mouse pancreas extract: sc-364244 or mouse lung extract: sc-2390.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Mesothelin (M-285): sc-50427. Western blot analysis of Mesothelin expression in non-transfected: sc-117752 (A) and mouse Mesothelin transfected: sc-121605 (B) 293T whole cell lysates and mouse pancreas (C) and mouse lung (D) tissue extracts.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\* Stable for one year from the date of shipment. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Mesothelin (K1): sc-33672** or **Mesothelin (G-4): sc-166125**, our highly recommended monoclonal alternatives to Mesothelin (M-285). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Mesothelin (K1): sc-33672**.