

Mesothelin (H-280): sc-50426

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

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

CHROMOSOMAL LOCATION

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

SOURCE

Mesothelin (H-280) is a rabbit polyclonal antibody raised against amino acids 295-574 mapping near the C-terminus of Mesothelin of human 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 (H-280) is recommended for detection of Mesothelin of human 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), immunohistochemistry (including paraffin-embedded sections) (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 (h): sc-45386, Mesothelin shRNA Plasmid (h): sc-45386-SH and Mesothelin shRNA (h) Lentiviral Particles: sc-45386-V.

Molecular Weight of Mesothelin precursor: 69 kDa.

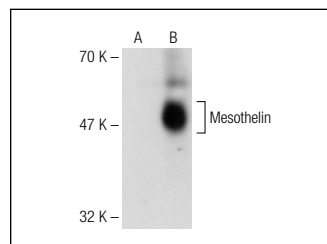
Molecular Weight of mature Mesothelin: 40 kDa.

Positive Controls: Mesothelin (h2): 293T Lysate: sc-171058, ES-2 cell lysate: sc-24674 or AN3 CA cell lysate: sc-24662.

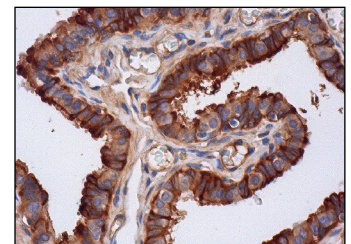
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Mesothelin (H-280): sc-50426. Western blot analysis of Mesothelin expression in non-transfected: sc-117752 (A) and human Mesothelin transfected: sc-171058 (B) 293T whole cell lysates.



Mesothelin (H-280): sc-50426. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing membrane and cytoplasmic staining of glandular cells.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **Mesothelin (K1): sc-33672** or **Mesothelin (C-2): sc-365324**, our highly recommended monoclonal alternatives to Mesothelin (H-280). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Mesothelin (K1): sc-33672**.