**BACKGROUND**

Mesothelin is a 40 kDa 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**


**CHROMOSOMAL LOCATION**

Genetic locus: MSLN (human) mapping to 16p13.3; Msln (mouse) mapping to 17A3.3.

**SOURCE**

Mesothelin (K1) is a mouse monoclonal antibody raised against spleen lymphocytes from mice fused with OVCAR-3 ovarian tumor cell line.

**PRODUCT**

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-33672 PE) or fluorescein (sc-33672 FITC) conjugates for flow cytometry, 100 tests.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Mesothelin (K1) is recommended for detection of Mesothelin of mouse and human origin by Western Blotting (starting dilution 1:100, 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 flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for Mesothelin siRNA (h): sc-45386, Mesothelin siRNA (m): sc-45387, Mesothelin shRNA Plasmid (h): sc-45386-SH, Mesothelin shRNA Plasmid (m): sc-45387-SH, Mesothelin shRNA (h) Lentiviral Particles: sc-45386-V and Mesothelin shRNA (m) Lentiviral Particles: sc-45387-V.

Molecular Weight of precursor Mesothelin: 69 kDa.

Molecular Weight of mature Mesothelin: 40 kDa.

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

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**RESEARCH USE**

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