Mesothelioma Monoclonal Antibody (ME1)

Product Details	
Size	25 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	ME1
Conjugate	Unconjugated
Immunogen	Mesothelioma cell line SPC111.
Form	Lyophilized
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325451

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	2-5 µg/mL	1 Publication
Immunocytochemistry (ICC/IF)	2-5 µg/mL	-
Flow Cytometry (Flow)	-	1 Publication
Radioimmune Assays (RIA)	Assay-dependent	-

Product Specific Information

MA2-310 detects a surface membrane glycoprotein preferentially expressed on normal and malignant mesothelial cells from human tissues. This antibody does not detect most lung adenocarcinoma cell lines, or well and moderately differentiated pulmonary adenocarcinomas.

MA2-310 has been successfully used in indirect immunofluorescence, immunocytochemistry, immunohistochemistry and solid-phase radioimmunoassay procedures. This antibody does not react in Western blot procedures. Immunohistochemical staining of sarcomatoid mesotheliomas with MA2-310 results in intense staining of mesothelial cells.

It has been reported that this antibody reacts with a 200 kDa surface membrane glycoprotein preferentially expressed on normal and malignant mesothelial cells, but does not react with most lung adenocarcinoma cell lines, or well and moderately differentiated pulmonary adenocarcinomas. In studies, this antibody was shown to react with all mesotheliomas examined, with 50%-99% of cells of both pleural and peritoneal mesotheliomas stained. Literature reports have indicated that the antibody does not bind with many common breast (MCF-7, T47D, ZR75-1, BT20, SJC38), ovarian (OVCA429, OVCA432, OVCA434), colon (SW480, SW620, CX1, WIDR, Co112), and renal-cell (FOHN, ZNH1) carcinoma cell lines, nor with several leukemia (K562, U937, CEM) or fibroblast (WI38, R2F) cell lines. Some reactivity has been reported with some pulmonary tumors of squamous-cell and small-cell carcinoma origin, adenocarcinoma of the breast, and ovary, and gastrointestinal adenocarcinomas. Also, melanomas and poorly differentiated pulmonary adenocarcinoma tumors have reacted with this antibody.

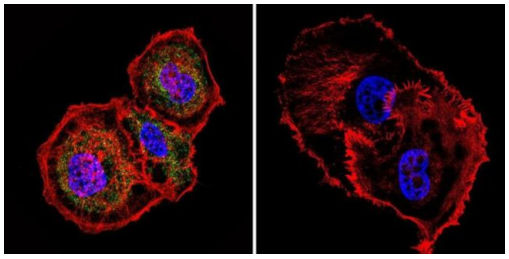
MA2-310 will not react with formalin-fixed, or alcohol-fixed, paraffin embedded tissues. Use of frozen, acetone fixed sections or

cell suspensions is recommended.

The MA2-310 antigen is mesothelioma cell line SPC111.

Reconstitute with PBS.

Product Images For Mesothelioma Monoclonal Antibody (ME1)



Mesothelioma Antibody (MA2-310) in ICC/IF
Immunofluorescent analysis of Mesothelioma in MCF-7 cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a Mesothelioma monoclonal antibody (Product # MA2-310) at a dilution of 1:20 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503). Mesothelioma staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.

2 References

Immunohistochemistry (1)

The American journal of pathology

ME1. A monoclonal antibody that distinguishes epithelial-type malignant mesothelioma from pulmonary adenocarcinoma and extrapulmonary malignancies.

"MA2-310 was used in immunohistochemistry to investigate the possible application of ME1 in distinguishing different tumors of the pleura and peritoneum"

Authors: O'Hara CJ,Corson JM,Pinkus GS,Stahel RA

Year
1990

Species
Human

Dilution
1:10

Flow Cytometry (1)

ACS applied materials & interfaces

Enhanced uptake of porous silica microparticles by bifunctional surface modification with a targeting antibody and a biocompatible polymer.

"MA2-310 was used in flow cytometry to develop modification strategy for increasing the cellular uptake of porous silica microparticles"

Authors: Cheng K,Blumen SR,MacPherson MB,Steinbacher JL,Mossman BT,Landry CC

Year
2010

Species
Human