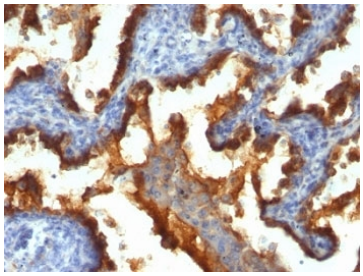
MUC1 Antibody / Mucin 1 [clone 139H2] (V2726)

Catalog No.	Formulation	Size
V2726-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2726-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2726SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2726IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

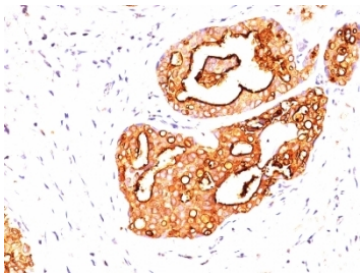
Citations (8)

Bulk quote request

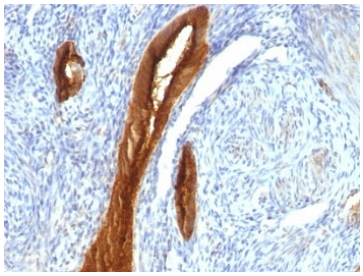
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	139H2
Purity	Protein G affinity chromatography
UniProt	P15941
Localization	Cytoplasmic and cell surface
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT ELISA : order the BSA free format for coating
Limitations	This MUC1 antibody is available for research use only.



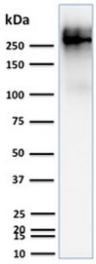
IHC: Formalin-fixed, paraffin-embedded human lung cancer stained with MUC1 antibody (clone 139H2).



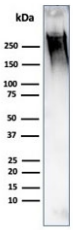
IHC: Formalin-fixed, paraffin-embedded human breast cancer stained with MUC1 antibody (clone 139H2).



IHC: Formalin-fixed, paraffin-embedded human endometrial carcinoma stained with MUC1 antibody (clone 139H2).



Western blot testing of human T47D cell lysate with MUC1 antibody. This glycoprotein is commonly visualized between 120~500 kDa.



Western blot testing of human MCF7 cell lysate with MUC1 antibody. This glycoprotein is commonly visualized between 120~500 kDa.

Description

MUC1 antibody clone 139H2 is a monoclonal antibody that recognizes mucin 1, a transmembrane glycoprotein expressed on the apical surface of most glandular epithelial cells. MUC1 is heavily glycosylated and contributes to epithelial protection, lubrication, and signal transduction. It is overexpressed and aberrantly glycosylated in many adenocarcinomas, including breast, ovarian, pancreatic, and lung cancers, making it one of the most studied tumor-associated antigens. NSJ Bioreagents provides this antibody for oncology, immunology, and epithelial biology research.

The antibody produces strong membranous and cytoplasmic staining in epithelial tissues and adenocarcinomas. In diagnostic pathology, MUC1 detection supports identification of adenocarcinomas and distinguishes them from mesothelial and non-epithelial tumors. Its expression pattern has become a valuable tool in tumor classification and lineage determination.

In oncology, MUC1 antibody clone 139H2 has been widely used to study tumor progression, metastasis, and immune evasion. Aberrant forms of MUC1 contribute to disruption of cell adhesion and facilitate tumor invasion. The antibody provides a reliable means of assessing MUC1 status in tumor samples and experimental systems.

In immunology, MUC1 has been studied as a target for vaccine development and antibody-based therapies. The antibody

supports investigations into how MUC1-derived peptides and glycopeptides can elicit immune responses and serve as therapeutic targets in cancer immunotherapy.

In normal physiology, MUC1 maintains epithelial barrier function, particularly in the respiratory and gastrointestinal tracts. This antibody has been used in research into epithelial defense mechanisms and mucosal biology.

Validated in tissue-based and cell-based assays, the antibody consistently delivers strong and specific staining with minimal background. Alternate names include EMA antibody, episialin antibody, and polymorphic epithelial mucin antibody.

Application Notes

Optimal dilution of the MUC1 antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human milk-fat globule membranes (HMFGM) was used as the immunogen for the MUC1 antibody.

Storage

Store the MUC1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).