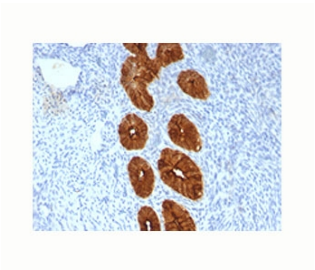
Epithelial Marker Antigen Antibody / MUC1 / Mucin-1 [clone MUC1/967] (V2370)

Catalog No.	Formulation	Size
V2370-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2370-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2370SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2370IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

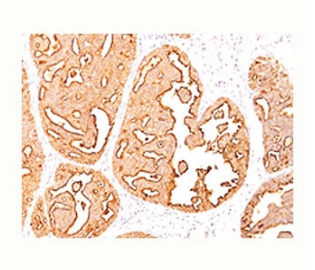
Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MUC1/967
Purity	Protein G affinity chromatography
Gene ID	4582
Localization	Cytoplasmic and cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This **Epithelial Marker Antigen antibody** is available for research use only.

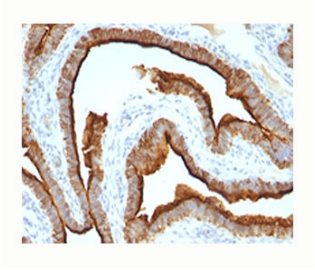
Western blot testing of human MCF7 cell lysate with Epithelial Marker Antigen antibody (clone MUC1/967). This glycoprotein is commonly visualized between 120~500 kDa.



Epithelial Marker Antigen antibody IHC testing of formalin-paraffin human endometrial cancer tissue (clone MUC1/967).



Epithelial Marker Antigen antibody IHC testing of formalin-paraffin human breast cancer tissue (clone MUC1/967).



Epithelial Marker Antigen antibody IHC testing of formalin-paraffin human ovarian cancer tissue (clone MUC1/967).

Description

This Epithelial Membrane Antigen / EMA antibody, also called MUC1 and Mucin-1, recognizes the full-length protein in a glycosylation-independent manner and can bind to the fully glycosylated protein. The dominant epitope of this mAb is APDTR in the VNTR region. It reacts with the core peptide of the EMA protein, which is a member of a family of mucin glycoproteins that are characterized by high carbohydrate content, O-linked oligosaccharides, high molecular weight (>200kDa) and an amino acid composition rich in serine, threonine, proline and glycine. The core protein contains a domain of 20 amino-acid tandem repeats that functions as multiple epitopes for the mAb. Incomplete glycosylation of some tumor-associated mucins may lead to variable unmasking of the multiple peptide epitopes leading to the observed differences in staining intensity between normal and malignant tissues. This EMA antibody reacts with both normal and malignant epithelia of various tissues including breast and colon.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Epithelial Marker Antigen antibody to be titered up or down for optimal performance.

1. FFPE staining REQUIRES boiling sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 10-20 min.
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 were used as the immunogen for this Epithelial Marker Antigen antibody.

Storage

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

References (1)