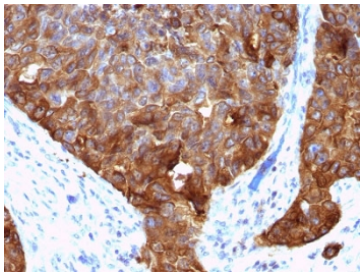
MUC1 Antibody / Mucin-1 [clone VU-4H5] (V7510)

Catalog No.	Formulation	Size
V7510-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7510-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7510SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7510IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

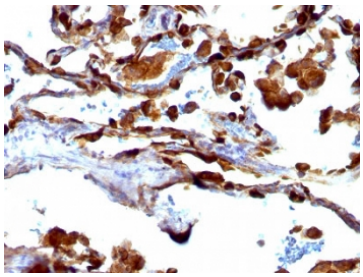
Citations (14)

Bulk quote request

Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	VU-4H5
Purity	Protein G affinity chromatography
UniProt	P15941
Localization	Cytoplasmic and cell surface
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This MUC1 antibody is available for research use only.



IHC testing of FFPE human colon carcinoma with MUC1 antibody (clone VU-4H5). HIER: requires steaming of sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



IHC testing of FFPE human lung carcinoma with MUC1 antibody (clone VU-4H5). HIER: requires steaming of sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

Description

MAb VU-4H5 reacts with MUC1, a large transmembrane glycoprotein expressed on the ductal surface of normal glandular epithelia. The dominant epitope of MAb VU-4H5 is APDTR as established with epitope fingerprinting. VU-4H5 preferentially binds to under-glycosylated tumor MUC1. The extracellular domain of MUC1 largely consists of a highly conserved, O-glycosylated 20 amino acids tandem repeat which can occur 30-100 times per molecule depending on the length of the allele involved. In the vast majority of human carcinomas this protein is upregulated and poorly glycosylated and appears on the cell surface in a non-polarized fashion. Antibody to MUC1 is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the MUC1 antibody to be titered up or down for optimal performance.

1. 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

Synthetic glycosylated MUC1 60mer tandem repeat NH2-(HGVTSAPDT(GalNAc)RPAPGSTAPPAHG)3-COOH, conjugated to bovine serum albuminn was used as the immunogen for this MUC1 antibody.

Storage

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