

Mouse Anti-MUC1 Monoclonal Antibody

CAB-1894MH Mouse(MUC1)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Mouse Anti-MUC1 Monoclonal Antibody
Antigen Description	This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants.
specificity	Binds with high efficiency with a region of GVTSAPDTRPAPGSTAPPAHGVTSA synthetic peptide spanning the one repeat of VNTR extracellular portion of MUC1 molecule. Reacts with VNTR5 and VNTR20 recombinant unglycosylated fragments of MUC1 protein and underglycosylated MUC1 prepared from tumor fluids or as a result of chemical treatment of human milk MUC1. Does not recognize natural MUC1 protein isolated from human milk by affinity purification on carbohydrate epitope specific monoclonals and belongs to Monoclonal Cluster 1-4 according to ISOMB TD-4 classification. Does not cross-react with egg white avidin.
Target	MUC1
Immunogen	High molecular weight (>300kDa) glycoprotein from human milk-fat globule molecule.
Host	Mouse
Isotype	IgG
Source	Ascites
Species	Human
Clone	N10H6
Affinity Constant	>1 x 10 ⁸
Purification	>90 % pure (SDS-PAGE). Protein A chromatography
conjugation	N/A
Applications	N/A

PACKAGING

Format	Purified, Liquid
Concentration	8.3mg/ml (OD280nm, E0.1% = 1.4)8.3mg/ml (OD280nm, E0.1% = 1.4)
Buffer	PBS, pH 7.4
Storage	Store at 2-8°C.
Preservative	0.1 % Sodium azide
Warning	This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0 %. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

ANTIGEN GENE INFORMATION

Gene Name	MUC1 mucin 1, cell surface associated [Homo sapiens]
Official Symbol	MUC1
Synonyms	MUC1; mucin 1, cell surface associated; mucin 1, transmembrane , PUM; mucin-1; CD227; PEM; episialin; DF3 antigen; H23 antigen; krebs von den Lungen-6; mucin 1, transmembrane; tumor-associated mucin; carcinoma-associated mucin; polymorphic epithelial mucin; peanut-reactive urinary mucin; tumor associated epithelial mucin; breast carcinoma-associated antigen DF3; tumor-associated epithelial membrane antigen; EMA; PUM; KL-6; MAM6; PEMT; H23AG; MUC-1; MUC-1/X; MUC1/ZD; MUC-1/SEC;
GeneID	4582
mRNA Refseq	NM_001018016
Protein Refseq	NP_001018016
MIM	158340
UniProt ID	P15941
Chromosome Location	1q22
Pathway	IL-7 Signaling Pathway, organism-specific biosystem; Metabolism of proteins, organism-specific biosystem; O-linked glycosylation of mucins, organism-specific biosystem; Post-translational protein modification, organism-specific biosystem; T Cell Receptor Signaling Pathway, organism-specific biosystem; Termination of O-glycan biosynthesis, organism-specific biosystem;
Function	RNA polymerase II core promoter proximal region sequence-specific DNA binding; p53 binding; protein binding; transcription cofactor activity;