

Product datasheet for **TA300711**

EMA (MUC1) Rabbit Monoclonal Antibody [Clone ID: EP1024Y]

Product data:

Product Type:	Primary Antibodies
Clone Name:	EP1024Y
Applications:	FC, ICC/IF, IHC, IP, WB
Recommended Dilution:	IHC-Fr: Use at an assay dependent concentration; WB: 1:1000 - 1:10000; IHC-P: Use at an assay dependent dilution; FC: 1:20; IP: 1:50; ICC/IF: 1/500
Reactivity:	Mouse, Rat, Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Synthetic peptide corresponding to Human MUC1 aa 1-100 (N terminal).
Specificity:	Based on the immunogen sequence, the antibody recognises several isoforms of MUC1 (Uniprot ID P15941). They are Isoform Y(28 kDa), Isoform Y-LSP (28 kDa), Isoform S2 (17 kDa) and Isoform J13 (28 kDa).
Formulation:	59% PBS, pH: 7.20, 40% Glycerol, 0.05% BSA, : 0.01% Sodium azide
Purification:	Tissue culture supernatant
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	mucin 1, cell surface associated
Database Link:	NP_002447 Entrez Gene 17829 Mouse Entrez Gene 24571 Rat Entrez Gene 4582 Human P15941



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Background:

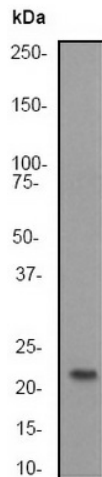
Mucins are high molecular weight glycoproteins that provide a protective layer on epithelial surfaces and are involved in cell-cell interactions, signaling, and metastasis. MUC1 consists of an extracellular subunit and a membrane-associated subunit (1). The two moieties are produced from a single precursor polypeptide by an early proteolytic cleavage event but remain associated throughout intracellular processing and transport to the cell surface. It has been shown that MUC1 expression inhibits erbB1 (regulators of cell survival and growth) degradation and also E-cadherin (2). Isoform 7 of MUC1 behaves as a receptor and binds the secreted isoform 5. The binding induces the phosphorylation of the isoform 7, alters cellular morphology and initiates cell signaling (3).

Synonyms:

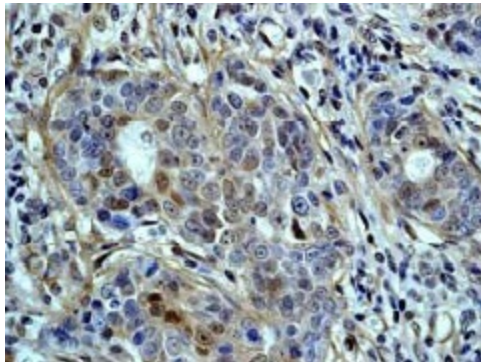
ADMCKD; ADMCKD1; CA 15-3; CD227; EMA; H23AG; KL-6; MAM6; MCD; MCKD; MCKD1; MUC-1; SEC

Protein Families:

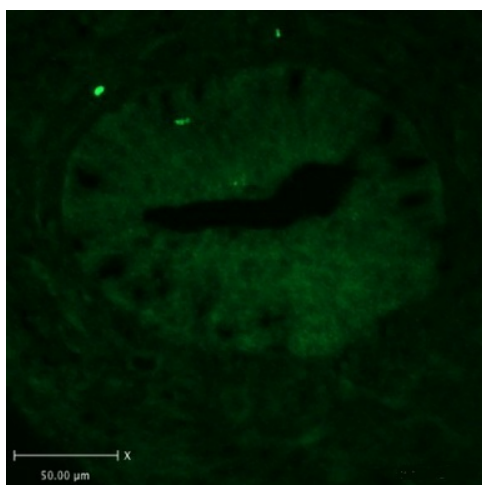
Druggable Genome, Secreted Protein, Transmembrane

Product images:

Western blot - MUC1 antibody [EP1024Y]; Anti-MUC1 antibody [EP1024Y] at 1/1000 dilution + T47D cell lysate at 10 ug. Secondary. Goat anti-rabbit HRP labelled, at 1/2000 dilution. Observed band size : 22 kDa.



Immunohistochemistry (Paraffin-embedded sections) - MUC1 antibody [EP1024Y]; Ab45167 at a 1/100 dilution, staining human MUC1 in human breast carcinoma by immunohistochemistry using paraffin embedded tissue.



Immunohistochemistry (Frozen sections) - Anti-MUC1 antibody [EP1024Y]; Ab45167 staining MUC1 on E14.5 mouse gut epithelium by IHC-Fr. The tissue was formaldehyde fixed and then blocked for 1 hour at 25°C. The primary antibody was diluted 1/400 and incubated with the sample for 16 hours at 4°C. An Alexa Fluor 488 conjugated goat anti-rabbit antibody was used as the secondary.