

Rabbit Anti-MUC1/EMA/CA15.3 [EP85]: RM0133, RM0133RTU7

Intended Use: For Research Use Only

Description: MUC1/EMA/CA15.3 is a high molecular weight and heavily glycosylated transmembrane protein. MUC1 is normally expressed in secretory epithelial cells and functions to provide a protective layer and mediate cell-cell interactions. Muc1 is a prominent oncogene and is present in many carcinomas with abnormal expression levels, modified glycosylation, and aberrant intracellular localization. Such carcinomas include breast, colorectal, prostate, and pancreatic cancer. MUC1 is used as a serological clinical marker of breast cancer to monitor response to breast cancer treatment and disease recurrence. Decreased levels over time may be indicative of a positive response to treatment. Conversely, increased levels may indicate disease progression. At an early stage disease, only 21% of patients exhibit high MUC1/EMA/CA15.3 levels, which is why CA15.3 is not a useful screening test. Most antibodies target the highly immunodominant core peptide domain of 20 amino acid (APDTRPAPGSTAPPAHGVTS) tandem repeats. Some antibodies recognize glycosylated epitopes.

Specifications

Clone: EP85
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Membrane, cytoplasm
 Formulation: Antibody in PBS pH 7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
MUC1/EMA/CA15.3 Concentrated	RM0133	1 ml
MUC1/EMA/CA15.3 Prediluted	RM0133RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Colon, colon cancer
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH 6.0 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human lung carcinoma tissue stained with anti-EMA/MUC1 using DAB

References:

1. Circulating tumour cells escape from EpCAM-based detection due to epithelial-to-mesenchymal transition. Gorges TM et al. BMC Cancer 12:178 2012.
2. Deletion of the mucin-like molecule muc1 enhances dendritic cell activation in response to toll-like receptor ligands. Williams MA et al. J Innate Immun 2:123-43 2010.
3. MicroRNA-145 suppresses cell invasion and metastasis by directly targeting mucin 1. Sachdeva M & Mo YY. Cancer Res 70:378-87 2010.
4. Kidney-derived stromal cells modulate dendritic and T cell responses. Huang Y et al. J Am Soc Nephrol 20:831-41 2009.

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