Mouse Anti-MUC1/EMA/Episialin/CD227 [139H2]: MC0868, MC0868RTU7

Intended Use: For Research Use Only

Description: Mucins are a family of heavily glycosylated high molecular weight glycoproteins. Total 21 mucins have been identified to date. Mucins are well known for its involvement in the protection and lubrication of luminal epithelial surfaces. MUC1, a transmembrane mucins, has been shown to be involved in several signaling pathways, including Ras, beta-catenin, p120 catenin, p53 and estrogen receptor alpha. When MUC1 forms a complex with beta-catenin, it enters the nucleus to activate T-cell factor/leukocyte enhancing factor 1 transcription factors and gene expression. In addition, MUC1 may inhibit cell-cell and cell-stroma interactions and function as a signal transducer, participating in cancer progression. MUC1 is expressed in many types of epithelial cell in gastrointerstinal tract, lung, breast, pancreas and genitourinary tract. MUC1 is also detected in activated and unactivated T-cells. In some tumors derived from epithelial cells, MUC1 expression is associated with tumor type and invasiveness. MUC1 expression has been correlated with invasive growth of ductal carcinomas (IDC) in the pancreas and cholangiocarcinomas in the liver. MUC2 expression has been associated with the intraductal papillary mucinous tumors of the pancreas, a non-invasice carcinoma. Additionally, MUC1 antibody aids in the prediction of the aggressiveness of carcinomas of the breast, stomach, colon, ampulla of Vater and renal cell carcinoma. Strong correlation has been observed between MUC1 expression and breast cancer progression.

Specifications

Clone:	139H2
Source:	Mouse
Reactivity:	Human, mouse
Isotype:	IgG1k
Localization:	Cytoplasm, membrane
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, Flow Cyt., IF
Package:	

Description	Catalog No.	Size
MUC1/EMA/Episialin/CD227 Concentrated	MC0868	1 ml
MUC1/EMA/Episialin/CD227 Prediluted	MC0868RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Colon, colon cancer
Concentrated Dilution:	50-200
Pretreatment:	Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

FFPE human breast cancer stained with anti-EMA/MUC1 using DAB

References:

1. Blocking the recruitment of naive CD4(+) T cells reverses immunosuppression in breast cancer. Su S, et al. Cell Res 27:461-482, 2017.
2. Combination of curcumin and bicalutamide enhanced the growth inhibition of androgen-independent prostate cancer cells through SAPK/JNK and MEK/ERK1/2-mediated targeting NF-?B/p65 and MUC1-C. Li J, et al. J Exp Clin Cancer Res 34:46, 2015.

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