

Mouse Anti-MUC4 [MD241]: MC0438, MC0438RTU7

Intended Use: For Research Use Only

Description: MUC4 is a high molecular weight glycoprotein that plays an important role in cell proliferation and differentiation of epithelial cells. The MUC4 gene is expressed in various normal epithelial tissues of endodermic origin and carcinomas derived from these tissues. MUC4 antibody labels normal epithelial cells in the trachea, GI tract and prostate, but not in the pancreas. Increased expression of MUC4 has been observed in pancreatic carcinoma and cervical squamous carcinoma. MUC4 is helpful in differentiating lung adenocarcinoma (positive) from malignant mesothelioma (negative). Additionally, MUC4 is useful in the identification of low-grade fibromyxoid sarcoma (LGFMS), and sclerosing epithelioid fibrosarcoma.

Specifications

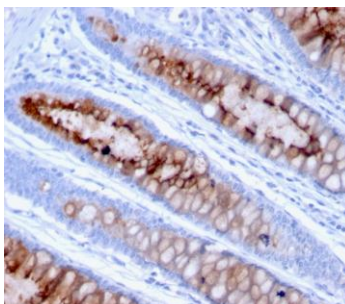
Clone:	MD241
Source:	Mouse
Isotype:	IgG2b/k
Reactivity:	Human
Immunogen:	Recombinant fragment aa 1730-1864 of human MUC4 protein
Localization:	Cytoplasm, membrane
Formulation:	Purified antibody in PBS pH 7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
MUC4 Concentrated	MC0438	1 ml
MUC4 Prediluted	MC0438RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Colon, lung cancer
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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 colon carcinoma stained with anti-MUC4 using DAB

References:

1. Expression of MUC4 mucin is observed mainly in the intestinal type of intraductal papillary mucinous neoplasm of the pancreas. Kitazono I, et al. Pancreas. 2013 Oct;42(7):1120-8.
2. MUC4 and MUC1 expression in adenocarcinoma of the stomach correlates with vessel invasion and lymph node metastasis: an immunohistochemical study of early gastric cancer. Tamura Y, et al. PLoS One. 2012;7(11):e49251.
3. Monoclonal antibodies recognizing the non-tandem repeat regions of the human mucin MUC4 in pancreatic cancer. Jain M, et al. PLoS One. 2011;6(8):e23344.