

Mouse Anti-MUC4 [8G7]: MC0448, MC0448RTU7

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: 8G7
 Source: Mouse
 Isotype: IgG1
 Reactivity: Human
 Localization: Cytoplasm, membrane
 Formulation: Purified antibody in 10 mM phosphate buffered saline (PBS), pH 7.2 containing 0.2% bovine serum albumin (BSA) and 15mM sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, IF, IP, WB
 Package:

| Description | Catalog No. | Size |
|-------------------|-------------|------|
| MUC4 Concentrated | MC0448 | 1 ml |
| MUC4 Prediluted | MC0448RTU7 | 7 ml |

IHC Procedure*

Positive Control Tissue: Colon, lung cancer
 Concentrated Dilution: 50-200
 Pretreatment: EDTA pH8.0 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.



Human ileum FFPE tissue 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.
4. Aberrant upregulation of MUC4 mucin expression in cutaneous condyloma acuminatum and squamous cell carcinoma suggests a potential role in the diagnosis and therapy of skin diseases. Chakraborty S, et al. *J Clin Pathol*. 2010 Jul;63(7):579-84.
5. Generation and characterization of anti-MUC4 monoclonal antibodies reactive with normal and cancer cells in humans. Moniaux N, et al. *J Histochem Cytochem*. 2004 Feb;52(2):253-61.

Doc. 100-MC0448
Rev. A