

Mouse Anti-MUC3 [M3.1]: MC0082, MC0082RTU7

Intended Use: For Research Use Only

Description: It recognizes a protein of HMW, identified as mucin 3 glycoprotein (MUC3). Its epitope localizes between aa SITTTE. This MAb shows no cross-reaction with human milk fat globule membranes, MUC1, or MUC2. MUC3 is distributed in colon and rectum, and is also present to a lesser extent in breast, lung and salivary gland tissues. The Mucins are a family of highly glycosylated, secreted proteins with a basic structure consisting of a variable number of tandem repeats (VNTRs) encoded by 60 base pairs (Mucin 1), 69 base pairs (Mucin 2) and 51 base pairs (Mucin 3). The number of repeats is highly polymorphic and varies among different alleles. Mucin 1 proteins are expressed as type I membrane proteins in addition to secreted forms. Mucin 1 is aberrantly expressed in epithelial tumors including breast carcinomas. Mucin 2 coats the epithelia of the intestines and airways and is associated with colonic tumors. Mucin 3 is a major component of various mucus gels and is broadly expressed in normal and tumor cells.

Specifications

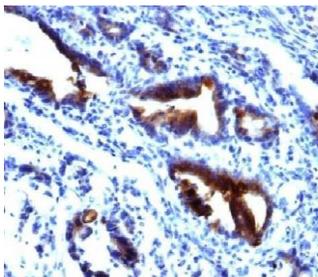
Clone: M3.1
 Source: Mouse
 Isotype: IgG2a/k
 Reactivity: Human
 Immunogen: Synthetic peptide of 35 amino acids, SIB35 (C-HSTPSFTSSITTETTTSHSTPSFTSSITTETTS), which contains two of the MUC3 tandem repeats, coupled to KLH
 Localization: Cytoplasm, membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
MUC3 Concentrated	MC0082	1 ml
MUC3 Prediluted	MC0082RTU7	7 ml

IHC Procedure*

Positive Control Tissue: LS174T cells or colon carcinoma and normal colon tissue
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 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 gastric carcinoma stained with anti-MUC3 using DAB

References

1. A comprehensive expression analysis of mucins in appendiceal carcinoma in a multicenter study: MUC3 is a novel prognostic factor. Shibahara H, et al. PLoS One. Dec 31;9(12):e115613, 2014.
2. Combined evaluation of CK5/6, ER, p63, and MUC3 for distinguishing breast intraductal papilloma from ductal carcinoma in situ. Furuya C, et al. Pathol Int. Jun;62(6):381-90, 2012.
3. Regulation of Sialyl Lewis Antigen Expression in Colon Cancer Cells by Sialidase NEU4. Shiozaki K et al. J Biol Chem 286:21052-61, 2011.