

**Mouse Anti-MSH6 [MD50]: MC0166, MC0166RTU7**

**Intended Use:** For Research Use Only

**Description:** The MutS homologue 6 protein (MSH6) is a member of the MutS homolog family required in the DNA mismatch repair system. Carriers of the mismatch repair gene mutations have a high lifetime risk of developing Hereditary Non-Polyposis Colon Cancer (HNPCC) and several other cancers including endometrial cancer due to microsatellite instability (MSI) caused by accumulation of DNA replication errors in proliferating cells. MSH6 antibody is useful for screening and diagnosis of patients with MSI. The level of MSI has been reported to be associated with prognosis in colon cancer.

**Specifications**

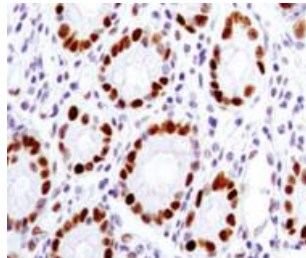
Clone: MD50  
 Source: Mouse  
 Reactivity: Human  
 Isotype: IgG2a  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
MSH6 Concentrated	MC0166	1 ml
MSH6 Prediluted	MC0166RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Colon, breast cancer  
 Concentrated Dilution: 25-100  
 Pretreatment: Citrate pH6.0 or 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.



FFPE human colorectal adenocarcinoma stained with anti-MSH6 using DAB

**References:**

1. Mismatch Repair Proteins and Microsatellite Instability in Colorectal Carcinoma (MLH1, MSH2, MSH6 and PMS2): Histopathological and Immunohistochemical Study. Ismael NE, et al. Open Access Maced J Med Sci. Mar 15;5(1):9-13, 2017.
2. Up-regulation of mismatch repair genes MSH6, PMS2 and MLH1 parallels development of genetic instability and is linked to tumor aggressiveness and early PSA recurrence in prostate cancer. Wilczak W, et al. Carcinogenesis. Jan;38(1):19-27, 2017.
3. Significant frequency of MSH2/MSH6 abnormality in ovarian endometrioid carcinoma supports histotype-specific Lynch syndrome screening in ovarian carcinomas. Rambau PF, et al. Histopathology. Aug;69(2):288-97, 2016.