

Mouse Anti-MSH2 [G219-1129]: MC0552, MC0552RTU7

Intended Use: For Research Use Only

Description: MutS homologue 2 (MSH2) is a DNA mismatch repair protein that belongs to the MutS family. MSH2 forms two different heterodimers: MutS alpha (MSH2-MSH6) and MutS beta (MSH2-MSH3), which bind to DNA mismatches thereby initiating DNA repair. Heterozygous mutations in the MSH2 gene are a cause of hereditary nonpolyposis colorectal cancer (HNPCC), forming a specific mismatch binding complex with MSH3 and MSH6. MutS alpha may also play a role in DNA homologous recombination repair. MSH2 is found in normal cells. Loss of MSH2 is linked to hereditary nonpolyposis colorectal cancer (HNPCC) and MSI-positive endometrial and ovarian cancers. Immunohistochemical analysis of MSH2 expression has been reported to be a practical and reliable method for the routine detection of the vast majority of MSI-H colorectal adenocarcinomas.

Specifications

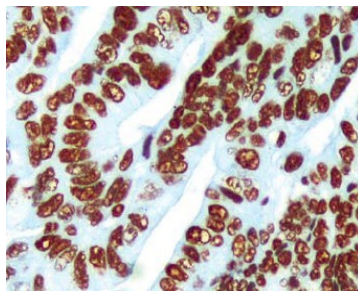
Clone: G219-1129
Source: Mouse
Reactivity: Human
Isotype: IgG1k
Localization: Nucleus
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
MSH2 Concentrated	MC0552	1 ml
MSH2 Prediluted	MC0552RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Colon, HNPCC
Concentrated Dilution: 50-100
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 colon carcinoma stained with anti-MSH2 using DAB

References:

1. Mutations of a mutS homolog in hereditary nonpolyposis colorectal cancer. Leach FS, et al. Cell. 1993; 75(6):1215-1225, 1993.
2. Dual requirement in yeast DNA mismatch repair for MLH1 and PMS1, two homologs of the bacterial mutL gene. Mol Cell Biol. Prolla TA, et al. 14(1):407-415, 1994.
3. Cloning and nucleotide sequence of DNA mismatch repair gene PMS1 from Saccharomyces cerevisiae: homology of PMS1 to procaryotic MutL and HexB. Kramer W, et al. J Bacteriol. 171(10):5339-5346, 1989.