

Monoclonal Antibody to MSH2

Cat. #:Mab-605087

Description:

MSH2 is a 100 kDa nuclear antigen and encodes a protein of 934 amino acids. The MSH2 gene is one of 4 known genes encoding proteins involved in the repair of mismatch nucleotides following DNA replication or repair. Mutations in the MSH2 gene contribute to the development of sporadic colorectal carcinoma. MSHS mutations are responsible for 50% of inherited non-polyposis colorectal (HNPCC). The repair of mismatch DNA is essential to maintaining the integrity of genetic information over time. An alteration of microsatellite repeats is the result of slippage owing to strand misalignment during DNA replication and is referred to as microsatellite instability (MSI). These defects in DNA repair pathways have been related to human carcinogenesis. MSH-2 is involved in the initial cognition of mismatch nucleotides during the replication mismatch repair process.

Immunogen/Specificity:

Ni-NTA purified recombinant human MSH2 expressed in E. Coli strain BL21 (DE3).

Applications :

Western Blot: Dilution 1: 200- 1: 1,000

IHC(P): Dilution 1: 200- 1: 1,000

IHC(F): Dilution 1: 200- 1: 1,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein G affinity chromatography.

References

1.Papadopoulos, N. 1994.

Science 263: 1625-1629.

2.Palombo, F. 1994.

Nature 367:417-418.

Clone Number: 3A2B8C

Isotype: IgG1

Species: Human

Storage and Stability: at -20oC

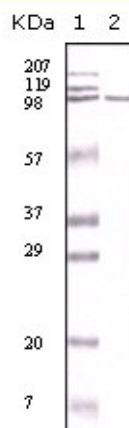


Figure 1: Western blot analysis using anti-Human MSH2 monoclonal antibody against A431 cell lysate.

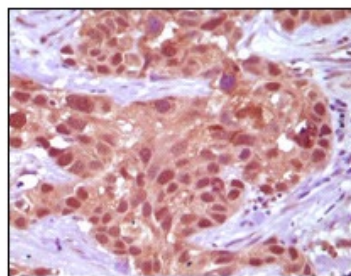


Figure 2: Immunohistochemical analysis of paraffin-embedded human rectum carcinoma tissue, showing nuclear and cytoplasmic localization, using MSH2 antibody with DAB staining.