

MSH2 Mouse Monoclonal Antibody

Background:

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.

Catalog Number: E10-20025

Amount: 100µg/100µl Clone Number: 1B3=3A2B8C Species: Mouse lgG1

MW: 105kDa

Aliases: FCC1; COCA1; HNPCC;LCFS2

Entrez Gene: 4436

Immunogen: Purified recombinant fragment of human MSH2 expressed in E. Coli.

Storage: Store at 4° C, for long term storage, store at -20° C **Formulation:** Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human; Monkey

Tested Applications: WB, IHC,IF, ELISA. Not yet tested in other applications. Determining optimal working

dilutions by titration test.

Application notes: WB.1/500 - 1/2000, IHC.1/200 - 1/1000, IF.1/200 - 1/1000, ELISA. Propose dilution 1/10000.

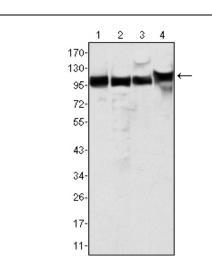
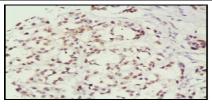


Figure 1. Western blot analysis using MSH2 mouse mAb against Hela (1),A549 (2), A431 (3) and HEK293 (4) cell lysate.



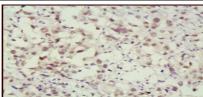


Figure 2. Immunohistochemical analysis of paraffin-embedded human breast cancer (left) and lung cancer (right) tissues, showing nuclear localization using MSH2 mouse mAb with DAB staining.

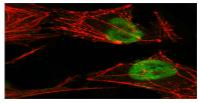


Figure 3. Confocal immunofluorescence analysis of Hela (left) and NTERA-2 (right) cells using NPM mouse mAb (green). Red. Actin filaments have been labeled with DY-554 phalloidin.