

## 36-2441: Anti-MSH6 (DNA Mismatch Repair Protein) Monoclonal Antibody(Clone: MSH6/3086)

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | MSH6/3086  |
| <b>Application :</b>           | ELISA,FACS,IF,WB,IHC   |
| <b>Reactivity :</b>            | Human  |
| <b>Gene :</b>                  | MSH6   |
| <b>Gene ID :</b>               | 2956   |
| <b>Uniprot ID :</b>            | P52701   |
| <b>Alternative Name :</b>      | DNA mismatch repair protein Msh6; G/T mismatch-binding protein; GTBP; GTMBP; hMSH6; HNPCC5; HSAP; MSH6; mutS (E. coli) homolog 6; MutS alpha 160kDa subunit; MutS-alpha 160kDa subunit; p160; Sperm associated protein |
| <b>Isotype :</b>               | Mouse IgG2b, kappa   |
| <b>Immunogen Information :</b> | Recombinant fragment of human MSH6 protein (around aa 374-540) (exact sequence is proprietary)   |

### Description

The finding that mutations in DNA mismatch repair genes are associated with hereditary nonpolyposis colorectal cancer (HNPCC) has resulted in considerable interest in the understanding of the mechanism of DNA mismatch repair. Initially, inherited mutations in the MSH2 and MLH1 homologs of the bacterial DNA mismatch repair genes mutS and mutL were demonstrated at high frequency in HNPCC and were shown to be associated with microsatellite instability. A member of the mismatch repair family, GTBP (also designated MSH6), is an MSH2-related protein that binds to DNA containing G/T mismatches. Findings suggest that the mismatch-binding factor in human cells is composed of a heterodimer of GTBP and MSH2.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

### Application Note

ELISA (For coating, order Ab without BSA); Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes),

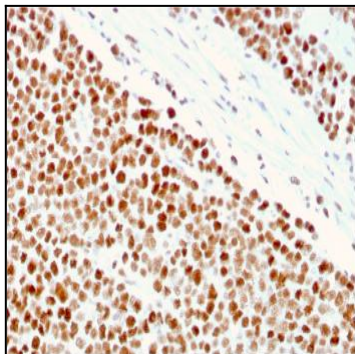


Fig. 1: Formalin-fixed, paraffin-embedded human Small Intestine stained with MSH6 Mouse Monoclonal Antibody (MSH6/3086).

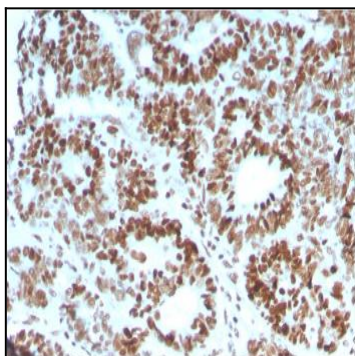


Fig. 2: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with MSH6 Mouse Monoclonal Antibody (MSH6/3086).

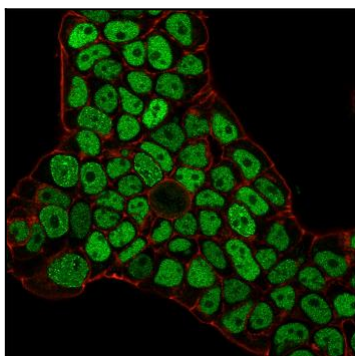


Fig. 3: Immunofluorescence staining of PFA-fixed MCF-7 cells with MSH6 Mouse Monoclonal Antibody (MSH6/3086) followed by goat anti-Mouse IgG-CF488 (Green). Nuclei are labeled with Reddot (Red).

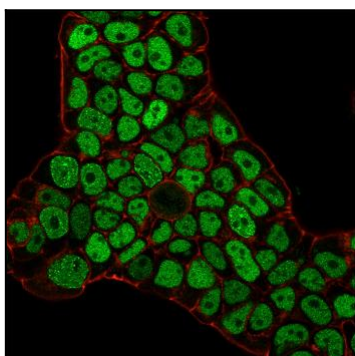


Fig. 4: Flow Cytometric Analysis of PFA-fixed MCF-7 cells using MSH6 Mouse Monoclonal Antibody (MSH6/3086) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

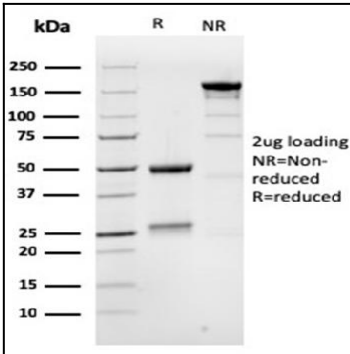


Fig. 5: SDS-PAGE Analysis Purified MSH6 Mouse Monoclonal Antibody (MSH6/3086). Confirmation of Purity and Integrity of Antibody.

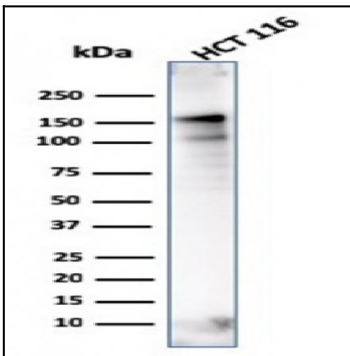


Fig. 6: Western Blot Analysis of HCT116 cell lysate using MSH6 Mouse Monoclonal Antibody (MSH6/3086).

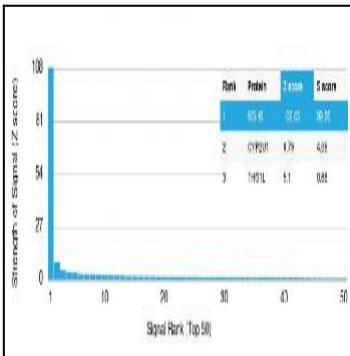


Fig. 7: Analysis of Protein Array containing >19,000 full-length human proteins using MSH6 Mouse Monoclonal Antibody (MSH6/3086) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.