

MSH6 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant MSH6.

Catalog # AT2912a

Product Information

Application	WB, IF, E
Primary Accession	P52701
Other Accession	NM_000179
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1F2
Calculated MW	152786

Additional Information

Gene ID	2956
Other Names	DNA mismatch repair protein Msh6, hMSH6, G/T mismatch-binding protein, GTBP, GTMBP, MutS-alpha 160 kDa subunit, p160, MSH6, GTBP
Target/Specificity	MSH6 (NP_000170, 931 a.a. ~ 1030 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MSH6 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

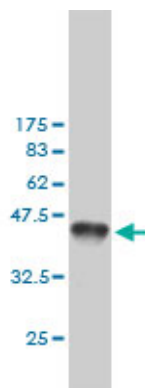
Background

This gene encodes a protein similar to the MutS protein. In *E. coli*, the MutS protein helps in the recognition of mismatched nucleotides, prior to their repair. A highly conserved region of approximately 150 aa, called the Walker-A adenine nucleotide binding motif, exists in MutS homologs. The encoded protein of this gene combines with MSH2 to form a mismatch recognition complex that functions as a bidirectional molecular switch that exchanges ADP and ATP as DNA mismatches are bound and dissociated. Mutations in this gene have been identified in individuals with hereditary nonpolyposis colon cancer (HNPCC) and endometrial cancer.

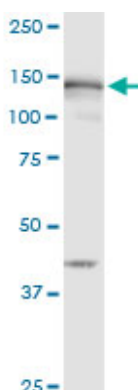
References

Risk of urothelial bladder cancer in Lynch syndrome is increased, in particular among MSH2 mutation carriers. van der Post RS, et al. J Med Genet, 2010 Jul. PMID 20591884. Comprehensive screen of genetic variation in DNA repair pathway genes and postmenopausal breast cancer risk. Monsees GM, et al. Breast Cancer Res Treat, 2010 May 23. PMID 20496165. A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000. One to 2-year surveillance intervals reduce risk of colorectal cancer in families with Lynch syndrome. Vasen HF, et al. Gastroenterology, 2010 Jun. PMID 20206180. MutSbeta exceeds MutSalph in dinucleotide loop repair. Kantelinen J, et al. Br J Cancer, 2010 Mar 16. PMID 20160730.

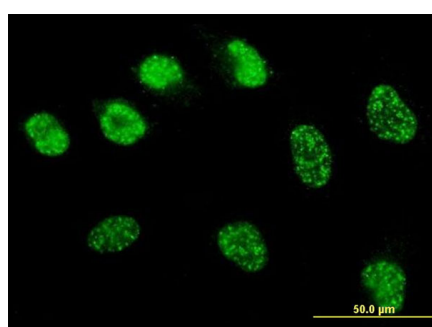
Images



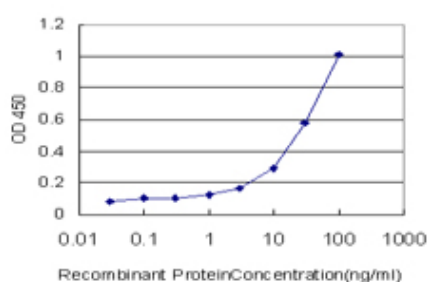
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



MSH6 monoclonal antibody (M01), clone 1F2. Western Blot analysis of MSH6 expression in human kidney.

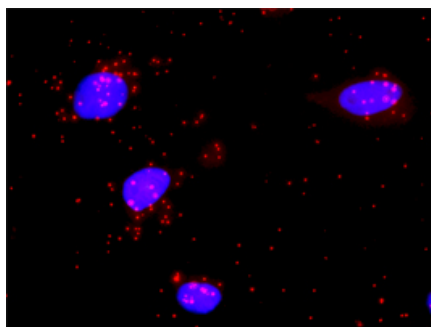


Immunofluorescence of monoclonal antibody to MSH6 on HeLa cell . [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged MSH6 is approximately 1 ng/ml as a capture antibody.

Proximity Ligation Analysis of protein-protein interactions



between MSH2 and MSH6 HeLa cells were stained with anti-MSH2 rabbit purified polyclonal 1:1200 and anti-MSH6 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.