



MutS Protein Homolog 6(MSH6) (ABT-MSH6) mouse mAb

Catalog No	YP-Ab-15277
Isotype	IgG
Reactivity	Human; Predict react with Mouse, Rat
Applications	IHC, WB, IF
Gene Name	MSH6 GTBP
Immunogen	Synthesized peptide derived from human MutS Protein Homolog 6(MSH6)
Specificity	This antibody detects endogenous levels of human MutS Protein Homolog 6(MSH6). Heat-induced epitope retrieval (HIER) TRIS-EDTA of pH8.0 was highly recommended as antigen repair method in paraffin sect
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Mouse, Monoclonal/IgG1, Kappa
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p 1:100-500, WB 1:500-1000, IF 1:500-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	G/T mismatch binding protein; G/T mismatch-binding protein; GTBP; GTMBP; hMSH6; MSH6; MSH6 GTBP; DNA mismatch repair protein Msh6 (hMSH6) (G/T mismatch-binding protein) (GTBP) (GTMBP) (MutS-alpha 160 kDa subunit) (p160)
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Nucleus . Chromosome . Associates with H3K36me3 via its PWWP domain.
Tissue Specificity	Epithelium, Placenta, Pooled, Testis,
Function	disease: Defects in MSH6 are a cause of susceptibility to endometrial cancer [MIM:608089]., disease: Defects in MSH6 are the cause of hereditary non-polyposis colorectal cancer type 5 (HNPCC5) [MIM:600678]. Mutations in more than one gene locus can be involved alone or in combination in the production of the HNPCC phenotype (also called Lynch syndrome). Most families with clinically recognized HNPCC have mutations in either MLH1 or MSH2 genes.



HNPCC is an autosomal, dominantly inherited disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to early onset colorectal carcinoma (CRC) and extra-colonic cancers of the gastrointestinal, urological and female reproductive tracts. HNPCC is reported to be the most common form of inherited colorectal cancer in the Western world. Cancers in HNPCC originate within benign neoplastic polyps

Background

This gene encodes a member of the DNA mismatch repair MutS family. 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 heterodimerizes 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 may be associated with hereditary nonpolyposis colon cancer, colorectal cancer, and endometrial cancer. Transcripts variants encoding different isoforms have been described. [provided by RefSeq, Jul 2013],

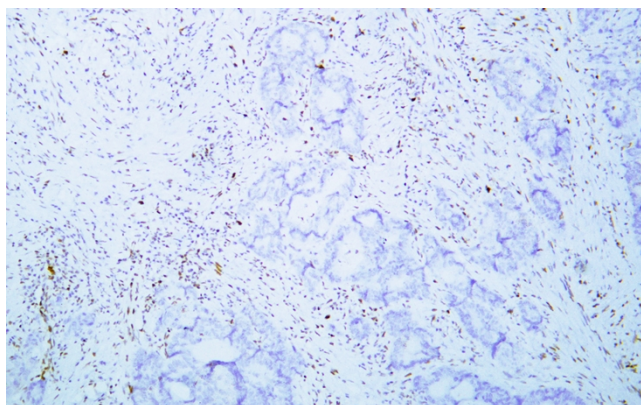
matters needing attention

Avoid repeated freezing and thawing!

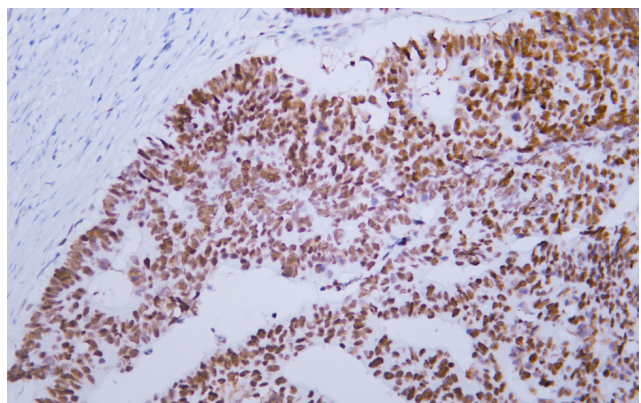
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

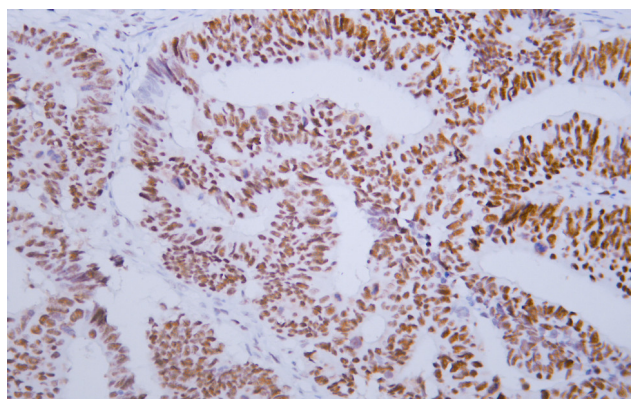
Products Images



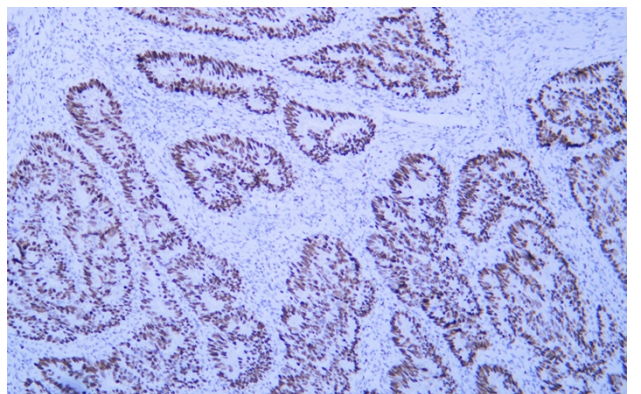
Human colon adenocarcinoma tissue with loss of MSH6 expression was stained with Anti-MSH6 (ABT-MSH6) Antibody



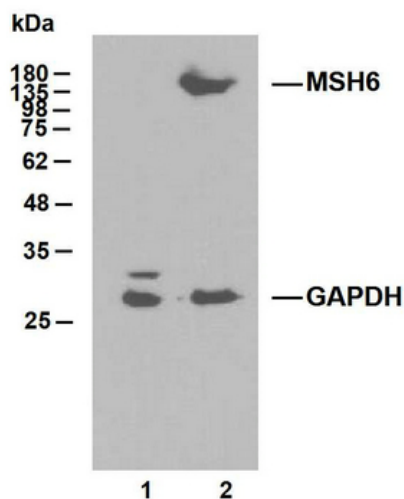
Human colon carcinoma tissue was stained with Anti-MSH6 (ABT-MSH6) Antibody



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Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-MSH6 and anti-GAPDH antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody. Lane 1 : MSH6 knockout HEK293 cell lysate Lane 2 : Wild type HEK293 cell lysate Predicted band size: 153 kDa Observed band size:: 153 kDa