

Anti-MSH6/Gtbp Rabbit Monoclonal Antibody Catalog # ABO13307

Specification

Anti-MSH6/Gtbp Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC
Primary Accession	P52701
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-MSH6/Gtbp Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-MSH6/Gtbp Rabbit Monoclonal Antibody - Additional Information

Gene ID 2956

Other Names

DNA mismatch repair protein Msh6, MutS-alpha 160 kDa subunit, p160, MSH6 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=7329 target="_blank">HGNC:7329), GTBP

Calculated MW

152786 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200

Subcellular Localization

Nucleus. Chromosome. Associates with H3K36me3 via its PWWP domain.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human MSH6

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-MSH6/Gtbp Rabbit Monoclonal Antibody - Protein Information

Name MSH6 ([HGNC:7329](#))

Synonyms GTBP

Function

Component of the post-replicative DNA mismatch repair system (MMR). Heterodimerizes with MSH2 to form MutS alpha, which binds to DNA mismatches thereby initiating DNA repair. When bound, MutS alpha bends the DNA helix and shields approximately 20 base pairs, and recognizes single base mismatches and dinucleotide insertion-deletion loops (IDL) in the DNA. After mismatch binding, forms a ternary complex with the MutL alpha heterodimer, which is thought to be responsible for directing the downstream MMR events, including strand discrimination, excision, and resynthesis. ATP binding and hydrolysis play a pivotal role in mismatch repair functions. The ATPase activity associated with MutS alpha regulates binding similar to a molecular switch: mismatched DNA provokes ADP-->ATP exchange, resulting in a discernible conformational transition that converts MutS alpha into a sliding clamp capable of hydrolysis-independent diffusion along the DNA backbone. This transition is crucial for mismatch repair. MutS alpha may also play a role in DNA homologous recombination repair. Recruited on chromatin in G1 and early S phase via its PWWP domain that specifically binds trimethylated 'Lys-36' of histone H3 (H3K36me3): early recruitment to chromatin to be replicated allowing a quick identification of mismatch repair to initiate the DNA mismatch repair reaction.

Cellular Location

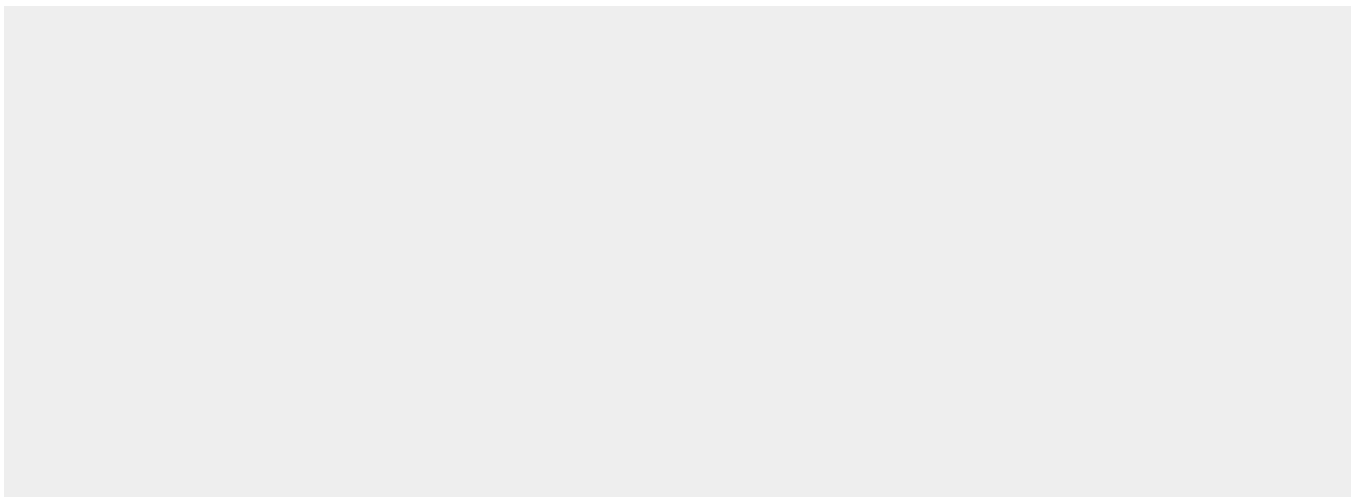
Nucleus. Chromosome. Note=Associates with H3K36me3 via its PWWP domain

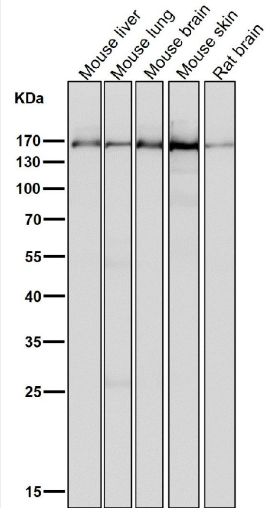
Anti-MSH6/Gtbp Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

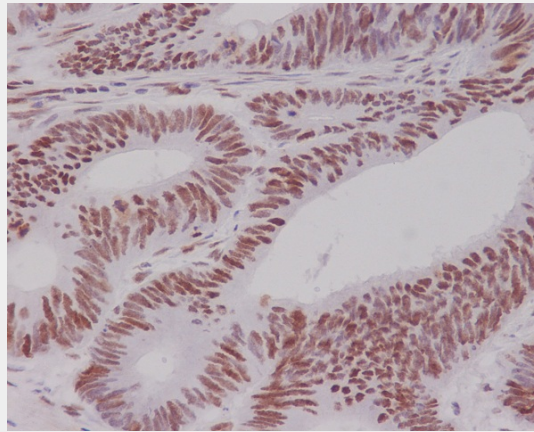
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-MSH6/Gtbp Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma, using MSH6 Antibody.