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MSH6
Rabbit Monoclonal antibody(Mab)
Catalog # AD80195

Specification

MSH6 - Product info

Application	**IHC-P**
Primary Accession	P52701
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Monoclonal**
Calculated MW	**152786**

MSH6 - Additional info

Gene ID	**2956**
Gene Name	**MSH6 (HGNC:7329)**

Other Names
DNA mismatch repair protein Msh6, MutS-alpha 160 kDa subunit, p160, MSH6 (HGNC:7329), GTBP

Dilution
IHC-P~~Ready-to-use

Storage
Maintain refrigerated at 2-8°C

Precautions	**MSH6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**

MSH6 - 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**

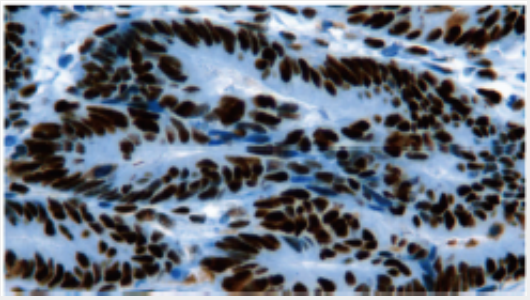
Cellular Location	**responsible for directing the downstream MMR events, including strand discrimination, excision, and resynthesis. ATP binding and hydrolysis play a pivotal role in mismatch repair functions. The ATPase activity associated with MutS alpha regulates binding similar to a molecular switch: 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. Nucleus. Chromosome. Note=Associates with H3K36me3 via its PWWP domain**

MSH6 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MSH6 - Images



Colon cancer

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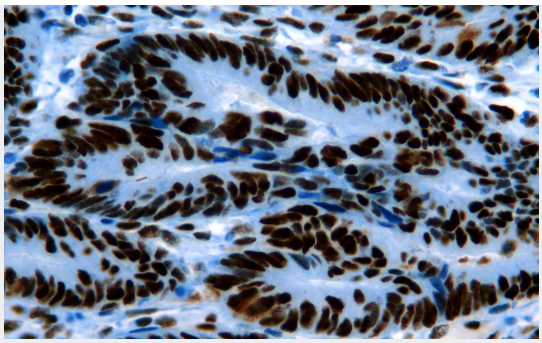

Immunohistochemical analysis of paraffin-embedded colorectal carcinoma; tissue using AD80195 performed on the Abcarta® FAIP-30 Fully automated IHC platform.Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems□Abcepta:AR005□ was used as the secondary antibody.