

**MSH6**  
**Rabbit Monoclonal antibody(Mab)**  
**Catalog # AD80195****Specification**

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**MSH6 - Product info**

Application	IHC-P, IHC
Primary Accession	<a href="#">P52701</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	152786

**MSH6 - Additional info**

Gene ID	2956
Gene Name	MSH6 ( <a href="#">HGNC:7329</a> )

**Other Names**

DNA mismatch repair protein Msh6, MutS-alpha 160 kDa subunit, p160, MSH6 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=7329" target="\_blank">HGNC:7329</a>), GTBP

**Dilution**

IHC-P~~Ready-to-use  
IHC~~Ready-to-use

Storage	<b>This product is stored at 2-8 °C, please use it within the expiration date.</b>
Precautions	<b>MSH6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.</b>

**MSH6 - Protein Information**

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

**Synonyms**  
**Function**

**GTBP**

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

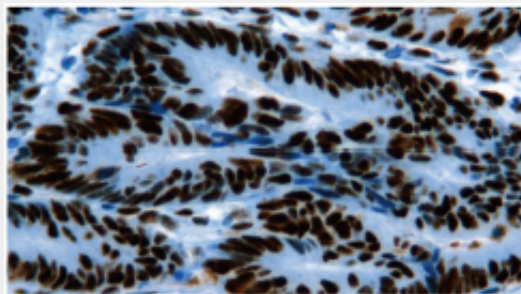
Cellular Location

### MSH6 - Protocols

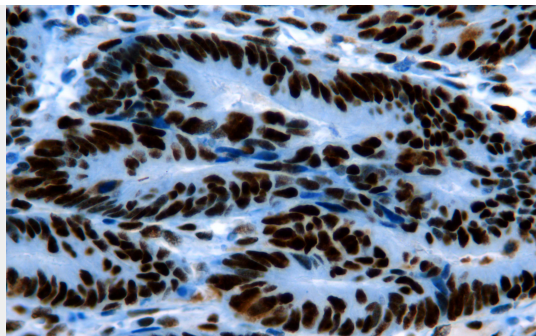
Provided below are standard protocols that you may find useful for product applications.

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

### MSH6 - Images



Colon cancer



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. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.