

## MSH6 Rabbit mAb

Catalog No: #49542

Package Size: #49542-1 50ul #49542-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

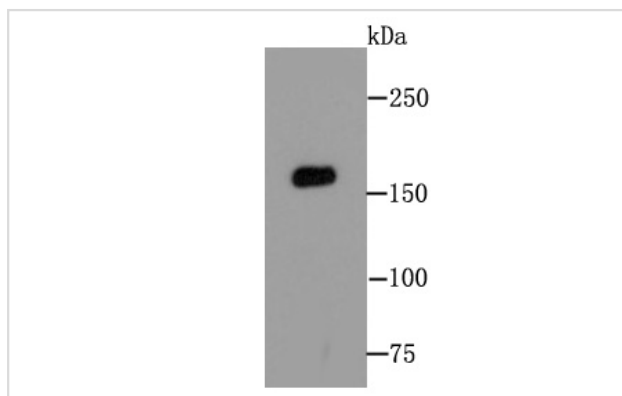
## Description

Product Name	MSH6 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JA84-26
Purification	ProA affinity purified
Applications	WB, IHC, IP
Species Reactivity	Hu, Ms
Immunogen Description	recombinant protein
Other Names	DNA mismatch repair protein Msh6 antibody G/T mismatch binding protein antibody G/T mismatch-binding protein antibody GTBP antibody GTMBP antibody hMSH6 antibody HNPCC 5 antibody HNPCC5 antibody HSAP antibody MSH 6 antibody MSH6 antibody MSH6_HUMAN antibody mutS (E. coli) homolog 6 antibody MutS alpha 160 kDa subunit antibody MutS homolog 6 (E. coli) antibody mutS homolog 6 antibody MutS-alpha 160 kDa subunit antibody p160 antibody Sperm associated protein antibody
Accession No.	Swiss-Prot#:P52701
Uniprot	P52701
GeneID	2956;
Calculated MW	153 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

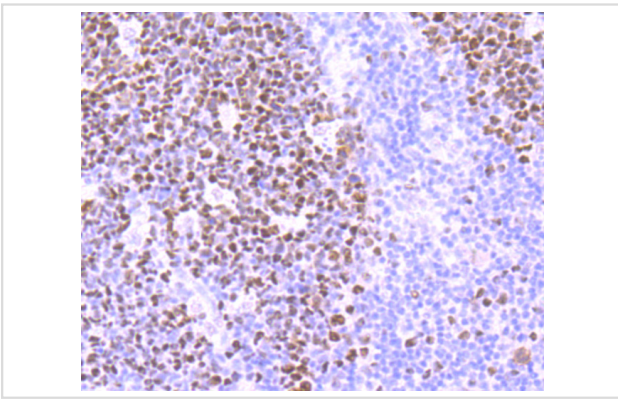
## Application Details

WB: 1:500-1:2,000 IHC: 1:50-1:200 IP: 1:10-1:50

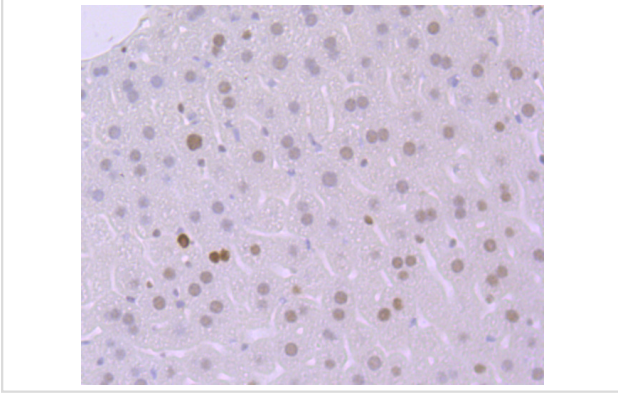
## Images



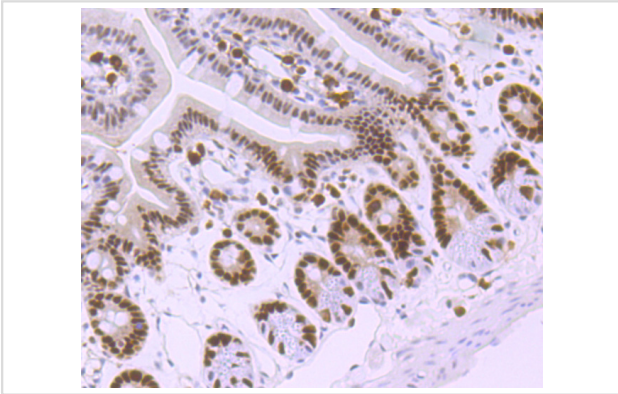
Western blot analysis of MSH6 on HeLa cell lysates using anti-MSH6 at 1/500 dilution.



Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-MSH6 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-MSH6 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-MSH6 antibody. Counter stained with hematoxylin.

## Background

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 $\rightarrow$ 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.

## References

Note: This product is for in vitro research use only