

## MSH2 antibody

### Product Information

Catalog No.:	FNab05371
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

### Background

Component of the post-replicative DNA mismatch repair system(MMR). Forms two different heterodimers: MutS alpha(MSH2-MSH6 heterodimer) and MutS beta(MSH2-MSH3 heterodimer) which binds to DNA mismatches thereby initiating DNA repair. When bound, heterodimers bend the DNA helix and shields approximately 20 base pairs. MutS alpha recognizes single base mismatches and dinucleotide insertion-deletion loops(IDL) in the DNA. MutS beta recognizes larger insertion-deletion loops up to 13 nucleotides long. After mismatch binding, MutS alpha or beta 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. In melanocytes may modulate both UV-B-induced cell cycle regulation and apoptosis.

### Immunogen information

Immunogen:	mutS homolog 2, colon cancer, nonpolyposis type 1(E. coli)
Synonyms:	DNA mismatch repair protein Msh2 (hMSH2) MutS protein homolog 2 MSH2
Observed MW:	105 kDa
Uniprot ID :	P43246

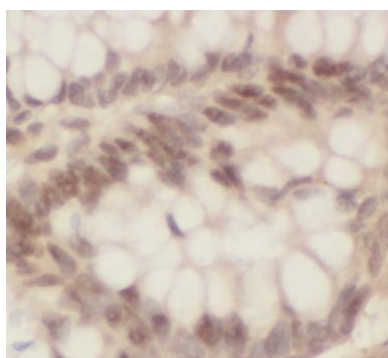
### Application

Reactivity: Human, Mouse, Rat

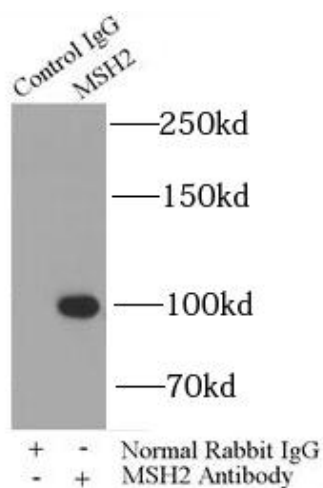
Tested Application: ELISA, WB, IHC, IF, FC, IP

Recommended dilution: WB: 1:1000-1:4000; IP: 1:500-1:1000; IHC: 1:20-1:200; IF: 1:10-1:100

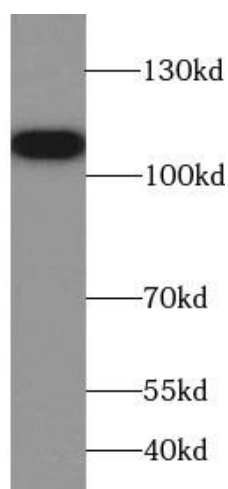
Image:



Immunohistochemistry of paraffin-embedded human colon cancer using FNab05371(MSH2 antibody) at dilution of 1:100



IP Result of anti-MSH2 (IP: FNab05371, 4ug; Detection: FNab05371 1:500) with HeLa cells lysate 2000ug.



HeLa cells were subjected to SDS PAGE followed by western blot with FNab05371(MSH2 antibody) at dilution of 1:1000