MSH6 antibody

Product Information

Catalog No.:	FNab05376
Size:	100μg
Form:	liquid
Purification:	Protein A+G purification
Purity:	≥95% as determined by SDS-PAGE
Host:	Mouse
Clonality:	monoclonal
Clone ID:	4C4
IsoType:	IgG2a
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20℃ for 12 months(Avoid repeated freeze / thaw cycles.)

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-->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.

Immunogen information

Immunogen:	mutS homolog 6
Synonyms:	DNA mismatch repair protein Msh6 (hMSH6)|G/T mismatch-binding protein (GTBP, GTMBP)|MutS protein homolog 6|MutS-alpha 160 kDa subunit (p160)|MSH6|GTBP
Observed MW:	160 kDa
Uniprot ID :	P52701

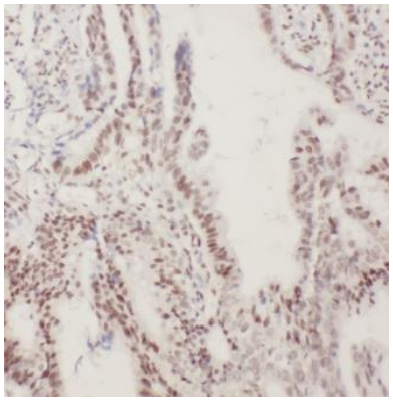
Application

Reactivity: Human

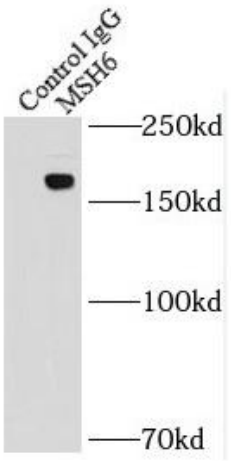
Tested Application: ELISA, WB, IHC, IP

Recommended dilution: WB: 1:500-1:2000; IP: 1:500-1:1000; IHC: 1:50-1:200

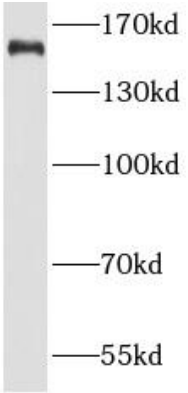
Image:



Immunohistochemistry of paraffin-embedded human colon cancer tissue slide using FNab05376(MSH6 Antibody) at dilution of 1:100



IP Result of anti-MSH6 (IP:FNab05376, 4ug; Detection:FNab05376 1:600) with HEK-293 cells lysate 1800ug.



HEK-293 cells were subjected to SDS PAGE followed by western blot with FNab05376(MSH6 Antibody) at dilution of 1:1000