

MSH6 Rabbit mAb

Catalog No: #52057

Package Size: #52057-1 50ul #52057-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

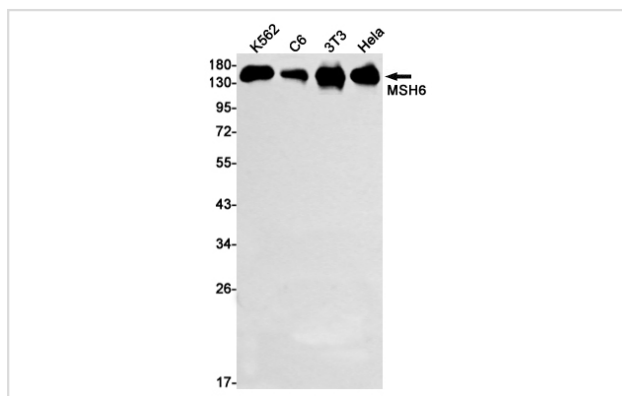
Description

Product Name	MSH6 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S05-2B5
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB IHC IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human MSH6
Conjugates	Unconjugated
Modification	Unmodification
Other Names	GTBP; HSAP; HNPCC5
Accession No.	Swiss-Prot:P52701GenelD:2956
Uniprot	P52701
GenelD	2956
Calculated MW	Calculated MW: 163 kDa; Observed MW: 163 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

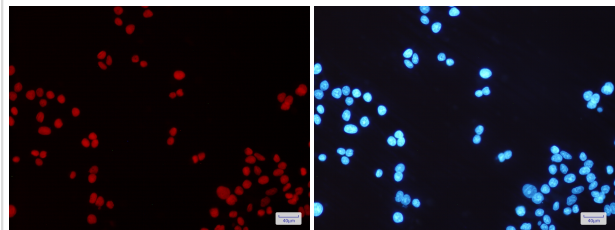
Application Details

WB: 1/2000; IHC: 1/50; ICC/IF: 1/50

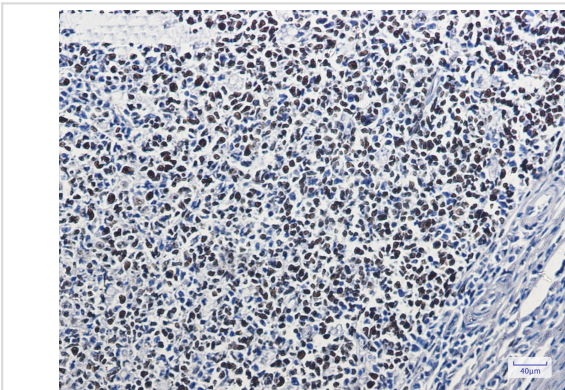
Images



Western blot detection of MSH6 in K562,C6,3T3,Hela cell lysates using MSH6 Rabbit mAb(1:1000 diluted).Predicted band size:163kDa.Observed band size:163kDa.



Immunofluorescence of MSH6(green) in HeLa cells using MSH6 Rabbit mAb at dilution 1/200, and DAPI(blue)



Immunohistochemistry of MSH6 in paraffin-embedded Human tonsil using MSH6 Rabbit mAb at dilution 1/1

Background

Swiss-Prot Acc.P52701.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.

Note: This product is for in vitro research use only