

MSH2 Antibody HRP Conjugated

Catalog No: #C00431H

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Description

Product Name	MSH2 Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	WB IHC-F
Species Reactivity	Hu Ms
Immunogen Description	KLH conjugated synthetic peptide aa 80-130 935 derived from human MSH-2
Conjugates	HRP
Target Name	MSH2
Other Names	FCC1; COCA1; HNPCC; LCFS2; HNPCC1; DNA mismatch repair protein Msh2; hMSH2; MutS protein homolog 2; MSH2
Accession No.	Swiss-Prot#P43246NCBI Gene ID4436
Uniprot	P43246
GeneID	4436;
Excitation Emission	N A
Cell Localization	Nucleus
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

WB=1:500-2000 IHC-F=1:50-200

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.

Note: This product is for in vitro research use only