

DNA mismatch repair protein Msh6 Recombinant Protein | MSH6 recombinant protein

Recombinant Human DNA mismatch repair protein Msh6

CATALOG #
AAA113627

HOST
E Coli or Yeast or Baculovirus or Mammalian Cell

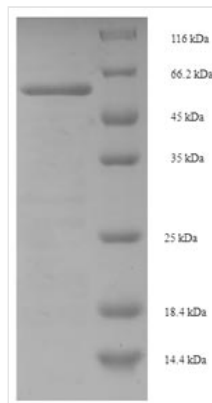
PRODUCT SYNONYMS

DNA mismatch repair protein Msh6; Recombinant Human DNA mismatch repair protein Msh6; G/T mismatch-binding protein; GTBP; GTMBP; MutS-alpha 160 kDa subunit; p160; MSH6 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-400aa; Partial
Sequence	MSRQSTLYSF FPKSPALSDA NKASARASRE GGRAAAPGA SPSPGGDAAW SEAGGPRPL ARSASPPKAK NLNGGLRRSV APAAPTSCDF SPGDLVWAKM EGYPPWWPCLV YNHPFDGTFI REKGKSVRVH VQFFDDSPTR GWVSKRLLKP YTGSKSKEAQ KGGHFYSAPK EILRAMQRAD EALNKDKIKR LELAVCDEPS EPEEEEEEMEV GTTYVTDKSE EDNEIESEEE VQPKTQGSRR SSRQIKRRV ISDESIGG SDVEFKPDTK EEGSSDEISS GVGDSESEGL NSPVKVARKR KRMVTGNGSL KRKSSRKETP SATKQATSIS SETKNTLRAF SAPQNSESQA HVSGGGDDSS RPTVWYHETL EWLKEEKRRD EHRRRPDHPD FFASTLYVPE
Sequence Length	1360
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for MSH6 recombinant protein	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
Product Categories/Family for MSH6 recombinant protein	Epigenetics and Nuclear Signaling

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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504191
NCBI GeneID	2956
NCBI Accession #	NP_000170.1
NCBI GenBank Nucleotide #	NM_000179.2
UniProt Accession #	P52701; O43706; O43917; Q8TCX4; Q9BTB5; B4DF41; B4E3I4; F5H2F9
Molecular Weight	60.1 kDa
NCBI Official Full Name	DNA mismatch repair protein Msh6 isoform 1
NCBI Official Synonym Full Names	mutS homolog 6
NCBI Official Symbol	MSH6
NCBI Official Synonym Symbols	GTBP; HSAP; p160; GTMBP; HNPCC5
NCBI Protein Information	DNA mismatch repair protein Msh6
UniProt Protein Name	DNA mismatch repair protein Msh6
UniProt Gene Name	MSH6
UniProt Synonym Gene Names	GTBP; hMSH6; GTBP; GTMBP; p160
UniProt Entry Name	MSH6_HUMAN

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