

Datasheet for ABIN7563446
MSH6 Protein (AA 1-1358) (His tag)



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Overview

Quantity:	1 mg
Target:	MSH6
Protein Characteristics:	AA 1-1358
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MSH6 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Msh6 Protein expressed in mammalien cells.
Sequence:	MSRQSTLYSF FPKSPALGDT KKAAAEASRQ GAAASGASAS RGGDAAWSEA EPGSRSAAVS ASSPEAKDLN GGLRRASSSA QAVPPSSCDF SPGDLVWAKM EGYPWWPCLV YNHFPDGTFI RKKGKSVRVH VQFFDDSPTR GWVSKRMLKP YTGSKSKEAQ KGGHFYSSKS EILRAMQRAD EALSKDTAER LQLAVCDEPS EPEEEEEETEV HEAYLSDKSE EDNYNESEEE AQPVSQGP RR SSRQVKKRRV ISDESIDIGG SDVEFKPDTK QEGSSDDASS GVGDS DSEDL GTFGKGAPKR KRAMVAQGGL RRSLSLKKETG SAKRATPILS ETKSTLSAFS APQNSESQTH VSGGGNDSSG PTVWYHETLE WLKPEKRRDE HRRRPDHPEF NPTTLYVPEE FLNSCTPGMR KWWQLKSQNF DLVIFYKVGK FYELYHMDAV IGVSELGLIF MKGNWAHSGF PEIAFGRFSD SLVQKGYKVA RVEQTETPEM MEARCRKMAH VSKFDRVRR EICRIITKGT QTYSVLGDGP SENYSRYLLS LKEKEEETSG HTRVYGVCV DTSLGKFFIG QFSDDRCSR FRTLVAHYPP VQILFEKGNL STETKTVLKG SLSSCLQEGL IPGSQFWDAT KTLRTLLEGG YFTGNGDSST VLPLVLKGMT

SESDSVGLTP GEESELALSA LGGIVFYLLK CLIDQELLSM ANFEEYFPLD SDTVSTVKPG
AVFTKASQRM VLDAVTLNNL EIFLNGTNGS TEGTLLERLD TCHTPFGKRL LKQWLCAPLC
SPSAISDRLD AVEDLMAVPD KVTEVADLLK KLPDLERLLS KIHNVGSPLK SQNHPDSRAI
MYEETTYSKK KIIDFLSALE GFKVMCKVSG LLEEVAAGFT SKTLKQVVTI QSKSPKGRFP
DLTAELQRWD TAFDHEKARK TGLITPKAGF DSDYDQALAD IRENEQSLLE YLDKQRSRLG
CKSIVYWIG RNRVQLEIPE NFATRNLPEE YELKSTKKGC KRYWTKTIEK KLANLINAEE
RRDTSLKDCM RRLFCNFDKN HKDWQSAVEC IAVLDVLLCL ANYSQGGDGP MCRPEIVLPG
EDTHPFLEFK GSRHPCITKT FFGDDFIPND ILIGCEEEAE EHGKAYCVLV TGPNMGGKST
LIRQAGLLAV MAQLGCYVPA EKRLTPVDR VFTRLGASDR IMSGESTFFV ELSETASILR
HATAHSLVLV DELGRGTATF DGTAIANAVV KELAETIKCR TLFSTHYHSL VEDYSKSVCV
RLGHMACMVE NECEDPSQET ITFLYKFIKG ACPKSYGFNA ARLANLPEEV IQKGHRKARE
FERMNQSLQL FREVCLATEK PTINGEAIHR LLALINGL **Sequence without tag. The proposed
Purification-Tag is based on experiences with the expression system, a different complexity
of the protein could make another tag necessary. In case you have a special request, please
contact us.**

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris Page, Western Blot

Grade: custom-made

Target Details

Target: MSH6

Target Details

Alternative Name: [Msh6 \(MSH6 Products\)](#)

Background: DNA mismatch repair protein Msh6 (G/T mismatch-binding protein) (GTBP) (GTMBP) (MutS protein homolog 6) (MutS-alpha 160 kDa subunit) (p160),FUNCTION: 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 (By similarity). {ECO:0000250|UniProtKB:P52701}.

Molecular Weight: 151.1 kDa

UniProt: [P54276](#)

Pathways: [DNA Damage Repair](#), [Chromatin Binding](#), [Production of Molecular Mediator of Immune Response](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months