

## Product datasheet for TP305848

### MSH2 (NM\_000251) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli) (MSH2), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC205848 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MAVQPKETLQLESAAEVGFVRRFFQGMPEKPTTTVRLFDRGDFYTAHGEDALLAAREVFKTQGVIKYMGPA  
GAKNLQSVVLSKMNFEFVKDLLLVRQYRVEVYKNRAGNKASKENDWYLAYKASPGNLSQFEDILFGNN  
D  
MSASIGVGVKMSAVDVGQRQVGVGVVDSIQRKLGCEFPDNDQFSNLEALLIQIGPKCEVLPGETAGDM  
GKLRQIIQRGGILITERKKADFSTKDIYQDLNRLKGGKGEQMNSAVLPEMENQVAVSSLSAVIKFLELL  
SDDSNFGQFELTTDFDSQYMKLDIAAVRALNLFQGSVEDTTGSQSLAALLNKCKTPQGQRLVNQWIKQPL  
MDKNRIEERLNLVEAFVEDAELRQTLQEDLLRRFPDLNRLAKKFQRQAANLQDCYRLYQGINQLPNVIQA  
LEKHEGKHQKLLLAVFVTPDLRSDFSKFQEMIETTLMDQVENHEFLVKPSFDPNLSREIMNDLEK  
KMQSTLISAARDLGLDPGKQIKLDSSAQFGYYFRVTCKEEKVLRNNKNFSTVDIQKNGVKFTNSKLTSLN  
EEYTKNKTEYEEAQDAIVKEIVNISSGYVEPMQTLNDVLAQLDAVVSFAHVSNGAPVPPYVRPAILEKGQG  
RIILKASRHACVEVQDEIAFIPNDVYFEKDKQMFHIITGPNMGGKSTYIRQTGVIVLMAQIGCFVPCESA  
EVSIVDCILARVGAGDSQLKGVSTFMAEMLETASILRSATKDSLIIIDELGRGTSTYDGFGLAWAISEYI  
ATKIGAFCMFATHFHELTALANQIPTVNNLHVTALTTEETLTMLYQVKKGVCDQSFQIHVAVELANFPKXV  
IECAKQKALELEEFQYIGESQGYDIMEPAAKKCYLEREQGEKIIQEFLSKVKQMPFTEMSEENITIKLKQ  
LKAETIAKNNSFVNEIISRIKVT

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

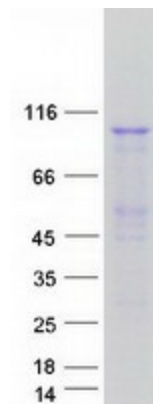
Tag:	C-Myc/DDK
Predicted MW:	104.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_000242</a>
<b>Locus ID:</b>	4436
<b>UniProt ID:</b>	<a href="#">P43246</a>
<b>RefSeq Size:</b>	3226
<b>Cytogenetics:</b>	2p21-p16.3
<b>RefSeq ORF:</b>	2802
<b>Synonyms:</b>	COCA1; FCC1; hMSH2; HNPCC; HNPCC1; LCFS2; MMRC52
<b>Summary:</b>	This locus is frequently mutated in hereditary nonpolyposis colon cancer (HNPCC). When cloned, it was discovered to be a human homolog of the E. coli mismatch repair gene mutS, consistent with the characteristic alterations in microsatellite sequences (RER+ phenotype) found in HNPCC. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]
<b>Protein Families:</b>	Druggable Genome, Stem cell - Pluripotency
<b>Protein Pathways:</b>	Colorectal cancer, Mismatch repair, Pathways in cancer

### Product images:



Coomassie blue staining of purified MSH2 protein (Cat# TP305848). The protein was produced from HEK293T cells transfected with MSH2 cDNA clone (Cat# [RC205848]) using MegaTran 2.0 (Cat# [TT210002]).