

Product datasheet for **MR226215**

Msh5 (NM_001146215) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Msh5 (NM_001146215) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Msh5
Synonyms:	Mut5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>MR226215 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTTCAGAGCGACCCAGGCCGACGCCCGGGACCCGGACCCAGATCCGGGATCCCTCAGCCA
 GCTTCCCAGCCCTCAGCCCCAATGGCGGGCCCTGGAGGTATCGAGGAAGAGGACGAGGAGGAGCCCGC
 TGAGATCCATCTGTGCGTGCTGTGGAGCTCGGGATACCTGGGCATTGCTTACTATGACACTAGTGACTCC
 ACTATCCACTTCATGCCAGATGCCCCAGACCACGAGAGCCTAAAGCTTCTCCAGAGAGTTCTGGATGAAA
 TCAACCCCACTGTTGTCAAAAGTGCCAAACAGGATGAGGCTATGACTCGATTCTAGGGAAGCTTGC
 CTCGAGGAGCACAGAGAGCCAAAGGGACCTGAAATCATACTTCTGCCAAGCGTGGATTTTGGTCCAGAG
 ATAAGCAAACAGCGTCTCCTTCCGAAACTACTCCTTCTCAGACTCCATGACTGCTACTGAGAAAA
 TCCTTTTCTCTCCTCATTATCCCTTTGACTGTGCTCCTCACGGTCCGGGCACTGGAGGACTGCTCAA
 GTTCTGAGTCAAGAAGAATTGGGGTTGAACTGGAAGACTATGATGTTGGCGTCCCTATCTGGGATTC
 AAGAAGTTTGATTGACCCATCTGGTGAGCATAGATCAAGACACTTACAGCGTTTACAGATTTTCAAGA
 GTGAGTCTCACCCCTCGGTGTACAAAGTAGCCAGTGGGCTGAAGGAGGGGCTCAGCCTTTTTGGAATCCT
 CAACAGATGCCGCTGTAAGTGGGGACAGAAGCTGCTCAGGCTGTGGTTTACACGTCCAACCCGGGAGCTA
 AGGGAACCAATCCCAGCTGGATGTCATTAGTTCTTCTGATGCCTCAGAACCTGGACATGGCCGAGA
 TGCTGCACCGACTCCTGAGCCACATCAAGAATGTGCCTCTGATTCTGAAACGCATGAAGTTGTCCACAC
 CAAGGTCACTGACTGGCAGGTCCTCTACAAGACTGTGTACAGTGTCTCGGCCTGAGGGATGCCTGCCGT
 TCTCTGCCACAGTCCATCCAGCTTTTTCAGGACATTGCCAGGAGTTCTCTGACGACCTGCATCACATTG
 CCAGCTCATCGGAAGGTGGTGGACTTTGAGGAAAGTCTTGTGAAAATCGCTTACAGCTCCCTCAATA
 CATAGACCCTGACATAGATGCCAAGAAGCGAAGGCTGATAGGGCTTCCGAGCTTCCCTCACTGAAGTTGCT
 CAGAAGGAGCTGGAGAACCTGGACTCTCGCATCCCTCATGCAAGTGTATCTACATCCCTCTGATTGGCT
 TCCTTCTTTCCATTCCCCGCTTGCCTTTTATGGTGAAGCTAGTGACTTTGAGATTGAGGGGCTGGACTT
 CATGTTTCTCTCAGAGGACAAGCTGCACTATCGTAGCGCCCGGACCAAGGAGCTGGACACGCTGCTGGGA
 GACCTGCACTGCGAGATCCGGGACCAGGAGACCCTGTTGATGTACCAGCTGCAGTGCCAGGTGCTGGCAC
 GGGCTTCGGTCTTGACTCGGTATTGGACCTTGCCTCCCGCTGGACGTCCTGTTGGCTCTTGCCAGTGC
 TGCCCGGGACTACGGCTATTCGAGACCGCATTACTCTCCCTGTATCCATGGAGTACGAATCAGGAATGGC
 AGGCATCCTCTGGTGAAGTGTGTGCACGAACCTTCGTGCCAACTCCACGGACTGTGGTGGGACCAGG
 GCAGGGTCAAAGTCATCACTGGGCCAACTCCTCAGGGAAAAGCATATATCTCAAGCAGGTAGGCTTGAT
 CACTTTCATGGCCCTGGTGGCAGTTTCGTGCCTGCAGAGGAGCCGAGATTGGGGTAATCGACGCCATC
 TTCCTCGAATTCACAGCTGCGAATCCATCTCCCTCGGCCTCTCCACCTTCATGATTGATCTCAACCAGG
 TGGCGAAAGCAGTGAACAATGCCACAGAGCACTCGCTGGTCTGATCGATGAATTCGGGAAGGGACCAA
 CTCGGTGGATGGCTGGCACTTCTGGCTGCTGTGCTCCGTCACTGGCTAGCACTGGGACCCAGCTGCCCC
 CACGTCTTTGTAGCCACCAACTTCTGAGCCTGTTCACTGCAGCTGCTGCCGAAGGACCCCTGGTGC
 AGTATTTGACCATGGAGACTTGTGAGGATGGGGAAGACCTGTCTTCTTACCAGCTTTGCCAAGGCGT
 CGCCAGTGCCAGCCAGCCTCCACACAGCGGCCAGGCTGGGCTTCTGACCCACTCATTGCTCGTGGC
 AAAGAGGTCTCAGACTTGATCCGCAGTGGGAAACCCATCAAGGCCACGAATGAGCTTCTAAGGAGAACC
 AAATGGAAAACCTGCCAGGCACTGGTGGATAAGTTTCTAAAACCTGGACTTGAGGATCCCACCCTGGACCT
 GGACATTTTCATTAGTCAGGAAGTGTGCCGCTGCTCCACCATCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR226215 protein sequence
 Red=Cloning site Green=Tags(s)

MAFRATPGRTPPGPGPRSGIPASAFPSPQPPMAGPGGIEEEDDEEPAEIHLCVLWSSGYLGIAYYDTS
 SDSTIHFMPDAPDHESLKLLQRVLDEINPQSVVTSAKQDEAMTRFLGKLASEEHREPKEIILLPSVDFGPE
 ISKQRLLSGNYSFISDSMTATEKILFLSSIIPFDCVLTVRALGGLLKFLSRRRIGVELEDYDVGVPIILGF
 KKFVLTHTLVSIDQDTYSVLQIFKSESHPSVYKVASGLKEGLSLFGILNRCRCKWGQKLLRLWFTRPTREL
 RELNSRLDVIQFFLMPQNLDMAQMLHRLLSHIKVNPLILKRMKLSHTKVSDWQVLYKTVYSALGLRDACR
 SLPQSIQLFQDIAQEFSDDLHHIASLIGKVDFEESLAENRFTVLPNIDPDIDAKRRLIGLPSFLTEVA
 QKELENLDSRIPSCSVIYIPLIGFLLSIPRLPFMVEASDFEIEGLDFMFLSEDKLHYRSARTKELDTLLG
 DLHCEIRDQETLLMYQLQCQVLRASVLRVLDLASRLDVLLALASAARDYGYSRPHYSPIHGVRIRNG
 RHPLVELCARTFVPNSTDCGGDQGRVKVITGPNSSGKSIYLKQVGLITFMALVGSFVPAEEAEIGVIDAI
 FTRIHSCEISLGLSTFMIDLNQVAKAVNNATEHSLVLIDFEGKGTNSVDGLALLAAVLRHWLALGPSCP
 HVFVATNFLSLVQLQLLPQGPLVQYLTMETCEDGEDLVFFYQLCQGVASASHASHTAAQAGLPDPLIARG
 KEVSDLIRSGKPIKATNELLRNQMENCQALVDKFLKLDLEDPTLDLDFISQEVLPAAPTIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001146215.1](#), [NM_001146215.2](#), [NP_001139687.1](#)

RefSeq Size: 2693 bp

RefSeq ORF: 2502 bp

Locus ID: 17687

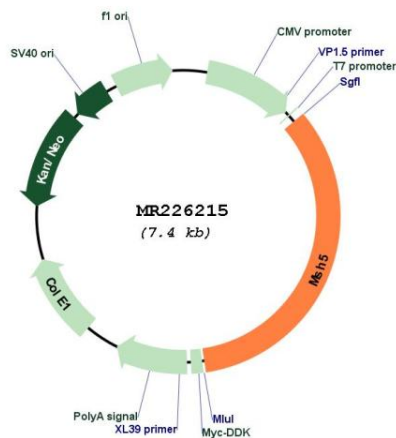
UniProt ID: [Q9QUM7](#)

Cytogenetics: 17 18.57 cM

MW: 92.6 kDa

Gene Summary: This gene encodes a member of the MutS family of proteins that play critical roles in DNA mismatch repair and meiotic homologous recombination processes. Mice lacking the encoded protein are viable but sterile, with severe defects in spermatogenesis in males and complete loss of ovarian structures in females. Mutations in a similar gene in humans have been shown to cause common variable immune deficiency (CVID) and immunoglobulin A deficiency. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jan 2015]

Product images:



Circular map for MR226215