

Product datasheet for **MC221931**

Msh5 (NM_013600) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Msh5 (NM_013600) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Msh5
Synonyms:	Mut5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221931 representing NM_013600
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTTCAGAGCGACCCAGGCCGACGCCCGGGACCCGGACCCAGATCCGGAATCCCTCAGCCA
 GCTTCCCCAGCCCTCAGCCCCAATGGCGGGCCCTGGAGGTATCGAGGAAGAGGACGAGGAGGAGCCCGC
 CGAGATCCATCTGTGCGTGCTGTGGAGCTCGGGATACCTGGGCATTGCTTACTATGACACTAGTGACTCC
 ACTATCCACTTTCAGCAGATGCCAGATGCCCCAGACCACGAGAGCCTAAAGCTTCTCCAGAGAGTTCTGGATGAAA
 TCAACCCCAAGTCTGTTGTCACAAGTGCCAAACAGGATGAGGCTATGACTCGATTCTAGGGAAGCTTGC
 CTCGAGGAGCACAGAGAGCCAAAGGGACCTGAAATCATACTTCTGCCAAGCGTGGATTTTGGTCCAGAG
 ATAAGCAAACAGCGTCTCCTTTCCGAAACTACTCCTTCTCAGACTCCATGACTGCTACTGAGAAAA
 TCCTTTTCTCTCTCCATTATCCCTTTGACTGTCTCCTCACGGTCCGGGCACTGGAGGACTGCTCAA
 GTTCTGAGTCAAGAAGAATTGGGGTTGAACTGGAAGACTATGATGTTGGCGTCCCTATCTGGGATTC
 AAGAAGTTTGATTGACCCATCTGGTGAGCATAGATCAAGACACTTACAGCGTTTACAGATTTTCAAGA
 GTGAGTCTCACCCCTCGGTGTACAAAGTAGCCAGTGGGCTGAAGGAGGGGCTCAGCCTTTTTGGAATCCT
 CAACAGATGCCGCTGTAAGTGGGGACAGAAGCTGCTCAGGCTGTGGTTTACACGTCCAACCCGGGAGCTA
 AGGGAACCAATTCCCGACTGGATGTCATTAGTTCTTCTGATGCCTCAGAACCTGGACATGGCCACAGA
 TGCTGCACCGACTCCTGAGCCACATCAAGAATGTGCCTGATTCTGAAACGCATGAAGTTGTCCACAC
 CAAGGTCAAGTACTGGCAGGTCCTCTACAAGACTGTGTACAGTCTCCTCGGCCTGAGGGATGCCTGCCGT
 TCTCTGCCACAGTCCATCCAGCTTTTTCAGGACATTGCCAGGAGTTCTCTGACGACCTGCATCACATTG
 CCAGCTCATCGGAAGGTGGTGGACTTTGAGGAAAGTCTTGTGAAAATCGCTTACAGCTCCCTCAATA
 CATAGACCCTGACATAGATGCCAAGAAGCGAAGGCTGATAGGGCTTCCGAGCTTCCCTCACTGAAGTTGCT
 CAGAAGGAGCTGGAGAACCTGGACTCTCGCATCCCTCATGCAGTGTATCTACATCCCTCTGATTGGCT
 TCCTTCTTTCCATTCCCCGCTTGCCTTTTTCATGGTGAAGCTAGTGACTTTGAGATTGAGGGGCTGGACTT
 CATGTTTCTCTCAGAGGACAAGCTGCACTATCGTAGCGCCCGGACCAAGGAGCTGGACACGCTGCTGGGA
 GACCTGCACTGCGAGATCCGGGACCAGGAGACCCTGTTGATGTACCAGCTGCAGTGCCAGGTGCTGGCAC
 GGGCTTCGGTCTTGACTCGGGTATTGGACCTTGCCTCCCGCTGGACGTCCTGTTGGCTCTTGCCAGTGC
 TGCCCGGGACTACGGCTATTCGAGACCGCATTACTCTCCCTGTATCCATGGAGTACGAATCAGGAATGGC
 AGGCATCCTCTGATGGAAGTGTGTGCACGAACCTTCGTGCCAACTCCACGGACTGTGGTGGGACCAGG
 GCAGGGTCAAAGTCACTACTGGGCCAACTCCTCAGGGAAAAGCATATATCTCAAGCAGGTAGGCTTGAT
 CACTTTCATGGCCCTGGTGGCAGTTTCGTGCCTGCAGAGGAGGCCGAGATTGGGGTAATCGACGCCATC
 TTCCTCGAATTCACAGCTGCGAATCCATCTCCCTCGGCCTCTCCACCTCATGATTGATCTCAACCAGG
 TGGCGAAAGCAGTGAACAATGCCACAGAGCACTCGCTGGTCTGATCGATGAATTCGGGAAGGGACCAA
 CTCGGTGGATGGCTGGCACTTCTGGCTGCTGTCTCCGTCAGTGGCTAGCACTGGGACCCAGCTGCCCC
 CACGCTTTGTAGCCACCAACTTCTGAGCCTGTTTCACTGCAGCTGCTGCCGAAGGACCCCTGGTGC
 AGTATTTGACCATGGAGACTTGTGAGGATGGGGAAGACCTGTCTTCTTACCAGCTTTGCCAAGGCGT
 CGCCAGTGCCAGCCAGCCTCCACACAGCGGCCAGGCTGGGCTTCTGACCCACTCATTGCTCGTGGC
 AAAGAGGTCTCAGACTTGATCCGCAAGTGGGAAACCCATCAAGGCCACGAATGAGCTTCTGAGGAGGAACC
 AAATGAAAACCTGCCAGGCACTGGTGGATACGTTTCTAAAACCTGGACTTGAGGATCCCACCCTGGACCT
 GGACATTTTCATTAGTCAGGAAGTGTGCCGCTGCTCCACCATCCTC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_013600
Insert Size: 2502 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">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_013600.3 , NP_038628.2
RefSeq Size:	2886 bp
RefSeq ORF:	2502 bp
Locus ID:	17687
UniProt ID:	Q9QUM7
Cytogenetics:	17 18.57 cM
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript. Variants 1 and 2 encode the same protein. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>