

Product datasheet for **SC320262**

MSH5 (NM_002441) Human Untagged Clone

Product data:

| | |
|---------------------------|---------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | MSH5 (NM_002441) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | MSH5 |
| Synonyms: | G7; MUTSH5; NG23; POF13 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC (PS100020) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

Fully Sequenced ORF:

>OriGene sequence for NM_002441.3
 GCGGTCGGTCAGCGGGCGTTCTCCACCTGTAGCGACTCAGAGCCTCCAAGCTCATGGC
 CTCCTTAGGAGCGAACCAAGGAGGACACCGCAGGGACCGAGACCTGGGGCGGCCTCCTC
 CGGCTTCCCAGCCCGGCCCAAGTGCCTGGGGCCCAAGGAGGCCGAGGAGGAGGAAGTCGA
 GGAGGAGGAGGAGCTGGCCGAGATCCATCTGTGTGTGCTGTGGAATTCAGGATACTTGGG
 CATTGCCTACTATGATACTAGTACTCCACTATCCACTTCATGCCAGATGCCCCAGACCA
 CGAGAGCCTCAAGCTTCTCCAGAGAGTTCTGGATGAGATCAATCCCCAGTCTGTTGTAC
 GAGTGCCAAACAGGATGAGAATGACTCGATTTCTGGGAAAGCTTGCCCTCCAGGAGCA
 CAGAGAGCCTAAAAGACCTGAAATCATATTTTTGCCAAGTGTGGATTTTGGTCTGGAGAT
 AAGCAAACAACGCCTCCTTTCTGAAAACACTCCTTCATCCCAGACGCCATGACTGCCAC
 TGAGAAAATCCTCTTCTCTCTCCATTATCCCTTTGACTGCCTCCTCAGATTCGAGC
 ACTTGGAGGGCTGCTGAAGTTCCTGGGTCGAAGAAGAATCGGGTTGAACTGGAAGACTA
 TAATGTCAGCGTCCCATCCTGGGCTTTAAGAAATTTATGTTGACTCATCTGGTGAACAT
 AGATCAAGACACTTACAGTGTCTACAGATTTTAAAGAGTGAGTCTCACCCCTCAGTGTA
 CAAAGTGGCCAGTGGACTGAAGGAGGGGCTCAGCCTCTTGGAACTCCTAACAGATGCCA
 CTGTAAGTGGGGAGAGAAGCTGCTCAGGCTATGGTTCACACGTCGGACTCATGACCTGGG
 GGAGCTCAGTTCTCGTCTGGACGTCATTCAAGTTTTTCTGCTGCCCCAGAACTGGACAT
 GGCTCAGATGCTGCATCGGCTCCTGGGTCACATCAAGAACGTGCCTCTGATTCTGAAACG
 CATGAAGTTGTCCACACCAAGGTCAAGGACTGGCAGGTTCTCTACAAGACTGTGTACAG
 TGCCCTGGGCCTGAGGGATGCCTGCCGCTCCCTGCCGAGTCCATCCAGCTCTTTTCGGGA
 CATTGCCAAGAGTTCTGTGATGACCTGCACCATATCGCCAGCCTCATTGGGAAAGTAGT
 GGACTTTGAGGGCAGCCTTGTGAAAATCGCTTACAGTCTCCCAACATAGATCCTGA
 AATTGATGAGAAAAGCGAAGACTGATGGGACTTCCCAGTTTCTTACTGAGGTTGCCCG
 CAAGGAGCTGGAGAATCTGGACTCCCGTATTCCTTCATGCAAGTGCATCTACATCCCTCT
 GATTGGCTTCTTCTTTCTATTCCCGCCTGCCTTCCATGGTAGAGGCCAGTGACTTTGA
 GATTAATGGACTGGACTTCATGTTTCTCTCAGAGGAGAAGCTGCACTATCGTAGTGCCCG
 AACCAAGGAGCTGGATGCATTGCTGGGGGACCTGCACTGCGAGATCCGGGACCAGGAGAC
 GCTGCTGATGTACCAGCTACAGTGCCAGGTGCTGGCAGCAGCAGTGTCTTAACCCGAGT
 ATTGGACCTTGCCTCCCGCTGGACGCTCCTGCTGGCTCTTGCCAGTGTGCCGGGACTA
 TGGCTACTCAAGGCCGCTTACTCCCAAGTCTTGGGGTACGAATCCAGAATGGCAG
 ACATCCTCTGATGGAACCTGTGCCCCAACCTTTGTGCCAACTCCACAGAAATGGTGG
 GGACAAAAGGAGGGTCAAAGTCATCACTGGACCAACTCATCAGGGAAGAGCATATACCT
 CAAACAGGTAGGCTTGATCACATTCATGGCCCTGGTAGGCAGCTTTGTGCCAGCAGAGGA
 GGCCGAAATTGGGGCAGTAGACGCCATCTTACACGAATTCATAGCTGCGAATCCATCTC
 CCTTGGCTCTCCACCTTCATGATCGACCTCAACCAGCAGGTGGCGAAAGCAGTGAACAA
 TGCCACTGCACAGTCGCTGGTCTTATTGATGAATTTGGAAAGGGAACCAACACGGTGA
 TGGGCTCGCGCTTCTGGCCGCTGTGCTCCGACACTGGCTGGCAGTGGACCCACATGCC
 CCACATCTTTGTGGCCACCAACTTCTGAGCCTTGTTCAGCTACAACGCTGCCACAAG
 GCCCTGGTGCAGTATTTGACCATGGAGACCTGTGAGGATGGCAACGATCTTGTCTTCT
 CTATCAGTTTGGGAAGGTGTTGCGAAGGCCAGCCATGCCTCCCACACAGCTGCCAGGC
 TGGGCTTCTGACAAGCTTGTGGCTCGTGGCAAGGAGGTCTCAGACTTGATCCGAGTGG
 AAAACCCATCAAGCCTGTCAAGGATTTGCTAAAGAAGAACCAATGGAAAATTGCCAGAC
 ATTAGTGGATAAGTTTATGAAACTGGATTTGGAAGATCCTAACCTGGACTTGAACGTTTT
 CATGAGCCAGGAAGTGTGCTGCTGCCACCAGCATCCTCTGAGAGTCTTCCAGTGTC
 TCCCCAGCCTCTGAGACTCCGGTGGGCTGCCATGCCCTCTTTGTTTCTTATCTCCCTC
 AGACGCAGAGTTTTAGTTTCTAGAAAATTTGTTTCATATTAGGAATAAAGTTTATTT
 TGAAGAAAAAAAAAAAAAAAAAAAAA

Restriction Sites:

Please inquire

ACCN:

NM_002441

| | |
|-------------------------------|---|
| 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). |
| OTI Annotation: | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| 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_002441.3 , NP_002432.1 |
| RefSeq Size: | 2903 bp |
| RefSeq ORF: | 2505 bp |
| Locus ID: | 4439 |
| UniProt ID: | O43196 |
| Cytogenetics: | 6p21.33 |
| Domains: | MutS_V, MutS_III, MutS_IV |
| Protein Families: | Druggable Genome |
| Gene Summary: | <p>This gene encodes a member of the mutS family of proteins that are involved in DNA mismatch repair and meiotic recombination. This protein is similar to a <i>Saccharomyces cerevisiae</i> protein that participates in segregation fidelity and crossing-over events during meiosis. This protein plays a role in promoting ionizing radiation-induced apoptosis. This protein forms hetero-oligomers with another member of this family, mutS homolog 4. Polymorphisms in this gene have been linked to various human diseases, including IgA deficiency, common variable immunodeficiency, and premature ovarian failure. Alternative splicing results multiple transcript variants. Read-through transcription also exists between this gene and the downstream chromosome 6 open reading frame 26 (C6orf26) gene. [provided by RefSeq, Feb 2011]</p> <p>Transcript Variant: This variant (3) differs in the 5' UTR and uses alternate in-frame splice sites in both the central and 3' coding regions, compared to variant 1, resulting in an isoform (c) that is longer than isoform a. Both variants 3 and 4 encode the same isoform.</p> |