

Product datasheet for **SC330653**

MSH2 (NM_001258281) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | MSH2 (NM_001258281) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | MSH2 |
| Synonyms: | COCA1; FCC1; hMSH2; HNPCC; HNPCC1; LCFS2; MMRCS2 |
| Vector: | pCMV6-Entry (PS100001) |



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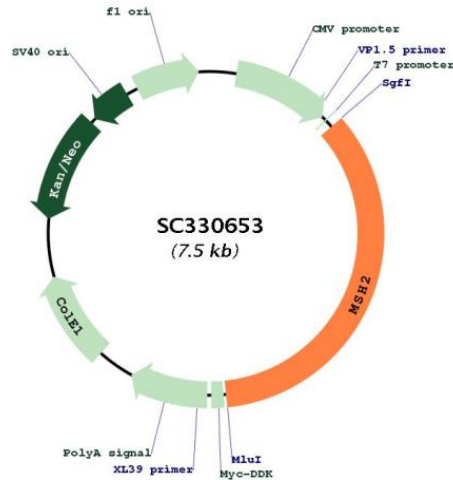
Fully Sequenced ORF: >SC330653 representing NM_001258281.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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Restriction Sites: Sgfl-Mlul

Plasmid Map:



ACCN: NM_001258281

Insert Size: 2607 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:

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_001258281.1](#)

RefSeq Size: 3042 bp

RefSeq ORF: 2607 bp

Locus ID: 4436

UniProt ID: [P43246](#)

Cytogenetics: 2p21-p16.3

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Colorectal cancer, Mismatch repair, Pathways in cancer

MW: 97.3 kDa

Gene Summary: 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]
Transcript Variant: This variant (2) lacks an alternate segment of the first exon, including the translation start site, compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.