

Product datasheet for **RC222842**

MYH (MUTYH) (NM_001048173) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | MYH (MUTYH) (NM_001048173) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | MYH |
| Synonyms: | MYH |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC222842 representing NM_001048173
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGAAGCCACGAGCAGCCGTGGGAAGTGGTACAGGAAGCAGGCAGCCAGCCAGGAAGGGAGGCAGA
 AGCATGCTAAGAACAACAGTCAGGCCAAGCCTTCTGCCTGTGATGGCCTGGCCAGGCAGCCGGAAGAGGT
 GGTATTGCAGGCCTCTGTCTCCTCATACCATCTATTAGAGACGTAGCTGAAGTACAGCCTCCGAGGG
 AGCCTGCTAAGCTGGTACGACCAAGAGAAACGGGACCTACCATGGAGAAGACGGGCAGAAGATGAGATGG
 ACCTGGACAGGGGGCATATGCTGTGTGGGTCTCAGAGGTGATGCTGCAGCAGACCCAGGTTGCCACTGT
 GATCAACTACTATACCGGATGGATGCAGAAGTGGCCTACACTGCAGGACCTGGCCAGTGTTCCTGGAG
 GAGGTGAATCAACTCTGGGCTGGCCTGGGCTACTATTCTCGTGGCCGGCGCTGCAGGAGGGAGCTCGGA
 AGGTGGTAGAGGAGCTAGGGGGCCACATGCCACGTACAGCAGAGACCCTGCAGCAGCTCCTGCCTGGCGT
 GGGGCGCTACACAGCTGGGGCCATTGCCTCTATCGCCTTTGGCCAGGCAACCGGTGTGGTGGATGGCAAC
 GTAGCACGGGTGCTGTGCCGTGTCCGAGCCATTGGTGTGATCCCAGCAGCACCTTGTTTCCCAGCAGC
 TCTGGGTCTAGCCCAGCAGCTGGTGGACCCAGCCCGCCAGGAGATTTCAACCAAGCAGCCATGGAGCT
 AGGGGCCACAGTGTGTACCCACAGCGCCACTGTGCAGCCAGTCCCTGTGGAGAGCCTGTGCCGGCA
 CGCCAGAGAGTGGAGCAGGAACAGCTCTTAGCCTCAGGGAGCCTGTGGGAGCCTGACGTGGAGGAGT
 GTGCTCCCAACTGGACAGTGCACCTGTGCCTGCCTCCCTCGGAGCCCTGGGACCAGACCCTGGGAGT
 GGTCAACTTCCCAGAAAGGCCAGCCGCAAGCCCCCAGGGAGGAGAGCTCTGCCACCTGTGTTCTGGAA
 CAGCCTGGGGCCCTTGGGGCCAAATCTGCTGGTGCAGAGGCCAACTCAGTCTGCTGGCAGGACTGT
 GGGAGTTCCTGTCGCTGACCTGGGAGCCCTCAGAGCAGCTTTCAGCGCAAGGCCCTGCTGCAGGACTACA
 GCGTTGGGCTGGGCCCTCCAGCCACGCACCTCCGGCACCTTGGGGAGGTTGTCCACACCTTCTCTCAC
 ATCAAGCTGACATATCAAGTATATGGGCTGGCCTTGAAGGGCAGACCCAGTGACCACCGTACCACCAG
 GTGCTCGCTGGCTGACGCAGGAGGAATTTACACCCGACGCTGTTTCCACCGCCATGAAAAAGTTTTCCG
 TGTGTATCAGGGCCAACAGCCAGGGACCTGTATGGGTTCCAAAAGGTCCCAGGTGCTCTCCGTGCAGT
 CGGAAAAAGCCCCGATGGGCCAGCAAGTCTGGATAATTTCTTTCGGTCTCACATCTCCACTGATGCAC
 ACAGCCTCAACAGTGCAGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222842 representing NM_001048173
 Red=Cloning site Green=Tags(s)

MRKPRAAVGSGHRKQAASQEGRQKHAKNNSQAKPSACDGLARQPEEVVLQASVSSVYHLFRDVAEVTAFRG
 SLLSWYDQEKRDLPWRRRAEDEMDDLDRRAYAVVWSEVMLQQTQVATVINYYTGWMQKWP TLQDLASASLE
 EVNQLWAGLGYYSRGRRLQEGARKVVEELGGHMPRTAETLQQLLPVGRYTAGAIASIAFGQATGVVDGN
 VARVLCRVRAIGADPSSTLVSQQLWGLAQQLVDPARPGDFNQAAMELGATVCTPQRPLCSQCPVESLCRA
 RQRVEQEQLLAGSLSGSPDVEECAPNTGQCHLCLPPSEPWDQTLGVVNFPRKASRKPPEESSATCVLE
 QPGALGAQILLVQRPNGLLAGLWEPFVSVTWEPEQLQRKALLQELQRWAGPLPATHLRHLGEVVHTFSH
 IKLTYQVYGLALEGQTPVTTVPPGARWLTQEEFHTAAVSTAMKKVFRVYQGGQPGTCMGSKRSQVSSPCS
 RKKPRMGQQVLDNFFRSHISTDAHSLNSAAQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja3721_c10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001048173

ORF Size: 1563 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001048173.1](#), [NP_001041638.1](#)

RefSeq Size: 1791 bp

RefSeq ORF: 1566 bp

Locus ID: 4595

UniProt ID: [Q9UIF7](#)

Cytogenetics: 1p34.1

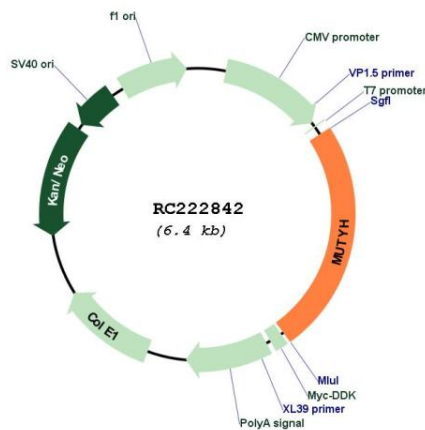
Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Base excision repair

MW: 57.4 kDa

Gene Summary: This gene encodes a DNA glycosylase involved in oxidative DNA damage repair. The enzyme excises adenine bases from the DNA backbone at sites where adenine is inappropriately paired with guanine, cytosine, or 8-oxo-7,8-dihydroguanine, a major oxidatively damaged DNA lesion. The protein is localized to the nucleus and mitochondria. This gene product is thought to play a role in signaling apoptosis by the introduction of single-strand breaks following oxidative damage. Mutations in this gene result in heritable predisposition to colorectal cancer, termed MUTYH-associated polyposis (MAP). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2017]

Product images:



Circular map for RC222842