

Product datasheet for **RG201376**

MYH (MUTYH) (NM_001048174) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYH (MUTYH) (NM_001048174) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYH
Synonyms:	MYH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG201376 representing NM_001048174
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACACCCTCGTCTCCCGCTGAGTCGTCTGTGGCCATCATGAGGAAGCCACGAGCAGCCGTGGGAA
 GTGGTCACAGGAAGCAGGCAGCCAGCCAGGAAGGAGGCAGAAGCATGCTAAGAACAACAGTCAGGCCAA
 GCCTTCTGCCTGTGATGGCCTGGCCAGGCAGCCGGAAGAGGTGGTATTGCAGGCCTCTGTCTCCTACAT
 CATCTATTAGAGACGTAGCTGAAGTCACAGCCTCCGAGGGAGCCTGCTAAGCTGGTACGACCAAGAGA
 AACGGGACCTACCATGGAGAAGACGGGCAGAAGATGAGATGGACCTGGACAGGCGGCATATGCTGTGTG
 GGTCTCAGAGGTCATGCTGCAGCAGACCCAGGTTGCCACTGTGATCAACTACTATACCGGATGGATGCAG
 AAGTGGCTACACTGCAGGACCTGGCCAGTGTCCCTGGAGGAGTGAATCAACTCTGGCTGGCCTGG
 GCTACTATTCTCGTGGCCGGCGCTGCAGGAGGAGCTCGGAAGTGGTAGAGGAGCTAGGGGCCACAT
 GCCACGTACAGCAGAGACCTGCAGCAGCTCCTGCCTGGCGTGGGGCGCTACACAGCTGGGGCCATTGCC
 TCTATCGCCTTTGGCCAGCAACCGGTGTGGTGGATGGCAACGTAGCACGGGTGCTGTGCCGTGCCGAG
 CCATTGGTGTGATCCCAGCAGCACCTTGTTCACAGCAGCTCTGGGGTCTAGCCCAGCAGCTGGTGGAA
 CCCAGCCCAGGAGAGATTTCAACCAAGCAGCCATGGAGCTAGGGGCCACAGTGTGATCCACAGCGC
 CCACTGTGCAGCCAGTGCCTGTGGAGAGCCTGTGCCGGCAGCCAGAGAGTGGAGCAGGAACAGCTCT
 TAGCCTCAGGGAGCCTGTGGGACGTCTGACGTGGAGGAGTGTGCTCCCAACACTGGACAGTGCACCT
 GTGCCTGCCTCCCTCGGAGCCCTGGGACCAGACCTGGGAGTGGTCAACTCCCCAGAAAGGCCAGCCGC
 AAGCCCCCAGGGAGGAGAGCTCTGCCACCTGTGTTCTGGAACAGCCTGGGGCCCTGGGGCCAAATTC
 TGCTGGTGCAGAGGCCAACTCAGTCTGCTGGCAGGACTGTGGGAGTCCCGTCCGTGACCTGGGAGCC
 CTCAGAGCAGCTTCAGCGCAAGGCCCTGCTGCAGGAACTACAGCGTTGGGCTGGGGCCCTCCAGCCAGC
 CACCTCCGGCACCTTGGGAGGTTGTCCACACCTTCTCTCACATCAAGCTGACATATCAAGTATATGGG
 TGGCCTTGAAGGGCAGACCCAGTGACCACCGTACCACCAGGTGCTCGTGGCTGACGCAGGAGGAATT
 TCACACCCGAGCTGTTCCACCGCCATGAAAAAGGTTTTCCGTGTGTATCAGGGCCAACAGCCAGGGACC
 TGTATGGGTTCCAAAAGTCCCAGGTGCTCTCCGTGCAGTCGAAAAAGCCCCGATGGGCCAGCAAG
 TCCTGGATAATTTCTTCGGTCTCACATCTCCACTGATGCACACGCCTCAACAGTGCAGCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG201376 representing NM_001048174
 Red=Cloning site Green=Tags(s)

MTPLVSRLSRLWAIMRKPRAAVGSGHRKQAAASQEGRQKHAKNNSQAKPSACDGLARQPEEVVLQASVSSY
 HLFRDVAEVTAFRGSLLSWYDQEKRDLPWRRRAEDEMDLDRRAYAVWVSEVMLQQTQVATVINYYTGWMQ
 KWPTLQDLASASLEEENQLWAGLGYYSRGRRLQEGARKVVEELGGHMPRTAETLQQLPGVGRYTAGAIA
 SIAFGQATGVVDGNVARVLCRVRAIGADPSSTLVSQQLWGLAQQLVDPARPGDFNQAAMELGATVCTPQR
 PLCSQCPVESLRCRARQRVEQEQLLASGSLSGSPDVEECAPNTGQCHLCLPPSEPWDQTLGVVNFPRKASR
 KPPREESSATCVLEQPGALGAQILLVQRPNSGLLAGLWEPFSVTWEPSEQLQRKALLQELQRWAGPLPAT
 HLRHLGEVVHTFSHIKLTYQVYGLALEGQTPVTTVPPGARWLTQEEFHTAAVSTAMKKVFRVYQQQPGT
 CMGSKRSQVSSPCSRKKPRMQQVLDNFFRSHISTDAHSLNSAAQ

TRTRPLE - GFP Tag - V

Chromatograms:

https://cdn.origene.com/chromatograms/ja3739_h06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001048174

ORF Size: 1605 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_001048174.1](#), [NP_001041639.1](#)

RefSeq Size: 1710 bp

RefSeq ORF: 1566 bp

Locus ID: 4595

UniProt ID: [Q9UIF7](#)

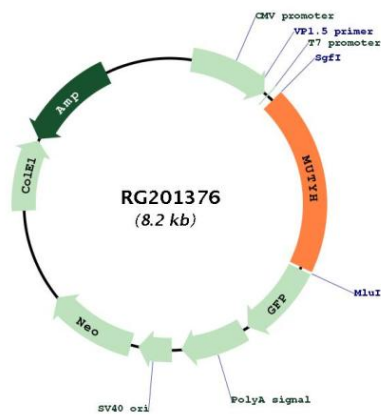
Cytogenetics: 1p34.1

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Base excision repair

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 RG201376