

## Product datasheet for **RG238177**

### MYH (MUTYH) (NM\_001293192) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYH (MUTYH) (NM_001293192) 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)
ORF Nucleotide Sequence:	>RG238177 representing NM_001293192. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACCTGGACAGGCGGGCATATGCTGTGTGGGTCTCAGAGGTCATGCTGCAGCAGACCCAGGTTGCC
ACTGTGATCAACTACTATAACCGATGGATGCAGAAAGTGGCCTACTGCAGGACCTGGCCAGTGCTTCC
CTGGAGGAGGTGAATCAACTCTGGGCTGGCCTGGGCTACTATTCTCGTGGCCGGCGGCTGCAGGAGGGA
GCTCGGAAGGTGGTAGAGGAGCTAGGGGGCCACATGCCACGTACAGCAGAGACCCCTGCAGCAGCTCCTG
CCTGGCGTGGGGCGCTACACAGCTGGGGCCATTGCCTCTATCGCCTTTGGCCAGGCAACCGGTGTGGTG
GATGGCAACGTAGCACGGGTGCTGTGCCGTGTCGAGCCATTGGTGTGATCCCAGCAGCACCCCTTGT
TCCCAGCAGCTCTGGGGTCTAGCCAGCAGCTGGTGGACCCAGCCGGCCAGGAGATTTCAACCAAGCA
GCCATGGAGCTAGGGGCCACAGTGTGTACCCACAGCGCCCACTGTGCAGCCAGTGCCCTGTGGAGAGC
CTGTGCCGGGCACGCGAGAGTGGAGCAGGAACAGCTCTTAGCCTCAGGGAGCCTGTGGGAGCTCCT
GACGTGGAGGAGTGTGCTCCCAACACTGGACAGTGCCACCTGTGCTGCCCTCCCTCGGAGCCCTGGGAC
CAGACCTGGGAGTGGTCAACTTCCCCAGAAAGGCCAGCCGCAAGCCCCCAGGGAGGAGAGCTCTGCC
ACCTGTGTTCTGGAACAGCCTGGGGCCCTTGGGGCCAAATTCTGCTGGTGCAGAGGCCAACTCAGGT
CTGCTGGCAGGACTGTGGGAGTTCCTGTCGTGACCTGGGAGCCCTCAGAGCAGCTTCAGCGCAAGGCC
GTGCTGCAGGAACTACAGCGTTGGGCTGGGCCCTCCAGCCAGCACCTCCGGCACCTTGGGAGGTT
GTCCACACCTTCTCTCACATCAAGCTGACATATCAAGTATATGGGCTGGCCTTGGAAAGGGCAGACCCCA
GTGACCACCGTACCACAGGTGCTCGTGGCTGACGCAGGAGGAATTTACACCCGAGCTGTTTCCACC
GCCATGAAAAAGGTTTTCCGTGTGTATCAGGGCCAACAGCCAGGGACCTGTATGGGTTCCAAAAGGTCC
CAGGTGTCCTCTCCGTGCAGTCGGAAAAAGCCCCGCATGGGCCAGCAAGTCTGGATAATTTCTTTCGG
TCTCACATCTCCACTGATGCACACAGCCTCAACAGTGCAGCCAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG238177  
 Blue=ORF Red=Cloning site Green=Tag(s)

MDLDRRAYAVVWSEVMLQQTQVATVINYYTGWMQKWPTLQDLASASLEEVNQLWAGLGYYSRGRRLQEG  
 ARKVVEELGGHMPRTAETLQQLPGVGRYTAGAIASIAFGQATGVVDGNVARVLCRVRAIGADPSSTLV  
 SQQLWGLAQQLVDPARPGDFNQAAMELGATVCTPQRPLCSQCPVESLRCRARQVEQEQLLASGSLSGSP  
 DVEECAPNTGQCHLCLPPSEPWDQTLGVVNFPRKASRKPPREESSATCVLEQPGALGAQILLVQRPNSG  
 LLAGLWEFPSVTWEPSEQLQRKALLQELQRWAGPLPATHLRHLGEVVHTFSHIKLTYQVYGLALEGQTP  
 VTTVPPGARWLTQEEFHTAAVSTAMKKVFRVYQGGQPGTCMGSKRSQVSSPCSRKKPRMGQQVLDNFFR  
 SHISTDAHSLNSAAQ  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001293192

**ORF Size:** 1287 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.

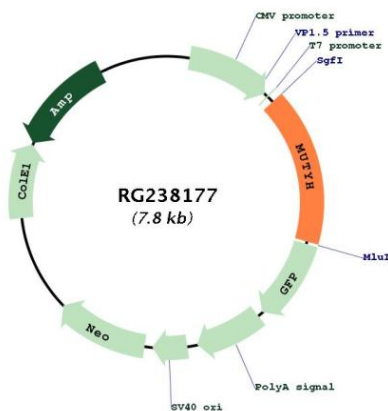
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**RefSeq:** [NM\\_001293192.1](#), [NP\\_001280121.1](#)

**RefSeq Size:** 1839 bp  
**RefSeq ORF:** 1290 bp  
**Locus ID:** 4595  
**UniProt ID:** [Q9UIF7](#)  
**Cytogenetics:** 1p34.1  
**Protein Families:** Druggable Genome, Stem cell - Pluripotency  
**Protein Pathways:** Base excision repair  
**MW:** 47.5 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 RG238177