

## Product datasheet for **SC336071**

### MYH (MUTYH) (NM\_001293192) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYH (MUTYH) (NM_001293192) Human Untagged Clone
Tag:	Tag Free
Symbol:	MUTYH
Synonyms:	MYH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC336071 representing NM_001293192. Blue=Insert sequence Red=Cloning site Green=Tag(s)

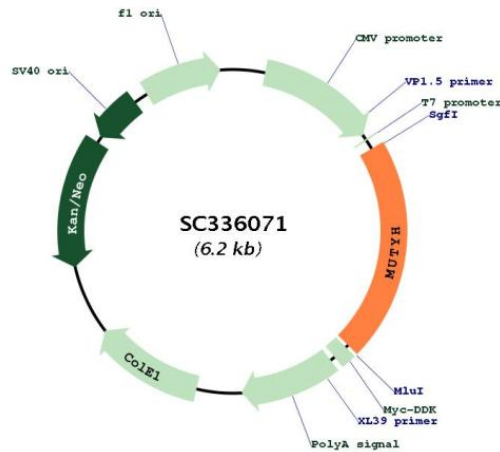
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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACCTGGACAGGCGGGCATATGCTGTGTGGGTCTCAGAGGTCATGCTGCAGCAGACCCAGGTTGCC
ACTGTGATCAACTACTATAACCGATGGATGCAGAAAGTGGCCTACTGCAGGACCTGGCCAGTGCTTCC
CTGGAGGAGGTGAATCAACTCTGGGCTGGCCTGGGCTACTATTCTCGTGGCCGGCGGCTGCAGGAGGGA
GCTCGGAAGGTGGTAGAGGAGCTAGGGGGCCACATGCCACGTACAGCAGAGACCCCTGCAGCAGCTCTG
CCTGGCGTGGGGCGCTACACAGCTGGGGCCATTGCCTCTATCGCCTTTGGCCAGGCAACCGGTGTGGTG
GATGGCAACGTAGCACGGGTGCTGTGCCGTGTCGAGCCATTGGTGTGATCCCAGCAGCACCCCTTGT
TCCCAGCAGCTCTGGGGTCTAGCCCAGCAGCTGGTGGACCCAGCCGGCCAGGAGATTTCAACCAAGCA
GCCATGGAGCTAGGGGCCACAGTGTGTACCCACAGCGCCCACTGTGCAGCCAGTGCCCTGTGGAGAGC
CTGTGCCGGGCACGCCAGAGAGTGGAGCAGGAACAGCTCTTAGCCTCAGGGAGCCTGTCCGGGAGTCC
GACGTGGAGGAGTGTGCTCCCAACACTGGACAGTGCCACCTGTGCCTGCCCTCCCTCGGAGCCCTGGGAC
CAGACCCCTGGGAGTGGTCAACTTCCCCAGAAAGGCCAGCCGCAAGCCCCCAGGGAGGAGAGCTCTGCC
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CTGCTGCAGGAACACAGCGTTGGGCTGGGCCCTCCAGCCAGCACCTCCGGCACCTTGGGGAGGTT
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GTGACCACCGTACCACAGGTGCTCGTGGCTGACGCAGGAGGAATTTACACCCGAGCTGTTTCCACC
GCCATGAAAAAGGTTTTCCGTGTGTATCAGGGCCAACAGCCAGGGACCTGTATGGTTCCAAAAGGTCC
CAGGTGTCCTCTCCGTGCAGTCGGAAAAAGCCCCGCATGGGCCAGCAAGTCTGGATAATTTCTTCCG
TCTCACATCTCCACTGATGCACACAGCCTCAACAGTGCAGCCAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

**Plasmid Map:**



ACCN: NM\_001293192

Insert Size: 1290 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\\_001293192.1](#)

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 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]  
Transcript Variant: This variant (alpha4) uses an alternate splice site in the 5' region, which results in translation initiation at a downstream AUG start codon, compared to variant alpha5. The resulting isoform (8) has a shorter N-terminus, compared to isoform 5. Variants alpha4 and gamma4 encode the same isoform 8.