

Product datasheet for **RG238178**

MYH (MUTYH) (NM_001293196) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYH (MUTYH) (NM_001293196) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MUTYH
Synonyms:	MYH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238178 representing NM_001293196. Blue=ORF Red=Cloning site Green=Tag(s)

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CAGGTGTCCTCTCCGTGCAGTCGGAAAAAGCCCCGCATGGGCCAGCAAGTCTGGATAATTTCTTCCG
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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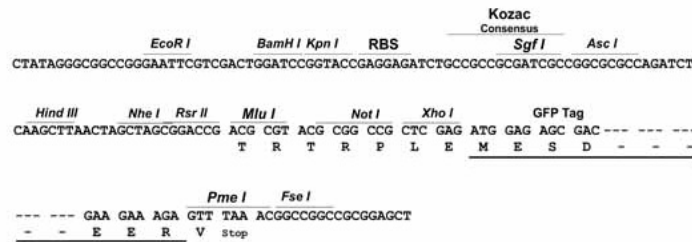
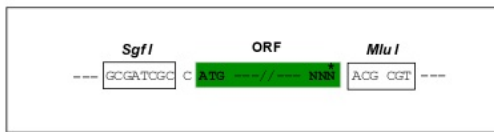
Protein Sequence: >Peptide sequence encoded by RG238178
 Blue=ORF Red=Cloning site Green=Tag(s)

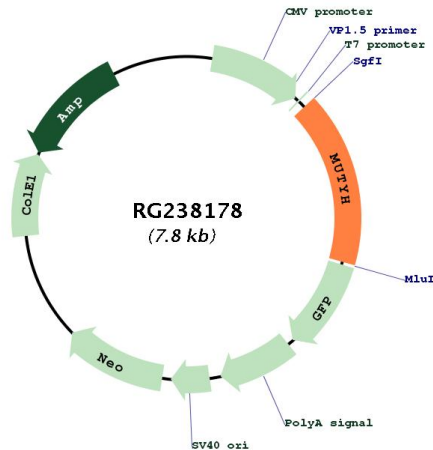
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 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001293196

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_001293196.1](#), [NP_001280125.1](#)

RefSeq Size: 1728 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]