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Product datasheet for RC201376

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:	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:

>RC201376 representing NM_001048174
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGAAGCCACGAGCAGCCGTGGGAAGTGGTCACAGGAAGCAGGCAGCCAGCCAGGAAGGGAGGCAGA
AGCATGCTAAGAACAACAGTCAGGCCAAGCCTTCTGCCTGTGATGGCCTGGCCAGGCAGCCGGAAGAGGT
GGTATTGCAGGCCTCTGTCTCCTCATACCATCTATTCAGAGACGTAGCTGAAGTCACAGCCTTCCGAGGG
AGCCTGCTAAGCTGGTACGACCAAGAGAAACGGGACCTACCATGGAGAAGACGGGCAGAAGATGAGATGG
ACCTGGACAGGCGGGCATATGCTGTGTGGGTCTCAGAGGTCATGCTGCAGCAGACCCAGGTTGCCACTGT
GATCAACTACTATACCGGATGGATGCAGAAGTGGCCTACACTGCAGGACCTGGCCAGTGCTTCCCTGGAG
GAGGTGAATCAACTCTGGGCTGGCCTGGGCTACTATTCTCGTGGCCGGCGGCTGCAGGAGGGAGCTCGGA
AGGTGGTAGAGGAGCTAGGGGGCCACATGCCACGTACAGCAGAGACCCTGCAGCAGCTCCTGCCTGGCGT
GGGGCGCTACACAGCTGGGGCCATTGCCTCTATCGCCTTTGGCCAGGCAACCGGTGTGGTGGATGGCAAC
GTAGCACGGGTGCTGTGCCGTGTCCGAGCCATTGGTGCTGATCCCAGCAGCACCCTTGTTTCCCAGCAGC
TCTGGGGTCTAGCCCAGCAGCTGGTGGACCCAGCCCGGCCAGGAGATTTCAACCAAGCAGCCATGGAGCT
AGGGGCCACAGTGTGTACCCCACAGCGCCCACTGTGCAGCCAGTGCCCTGTGGAGAGCCTGTGCCGGGCA
CGCCAGAGAGTGGAGCAGGAACAGCTCTTAGCCTCAGGGAGCCTGTCGGGCAGTCCTGACGTGGAGGAGT
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CAGCCTGGGGCCCTTGGGGCCCAAATTCTGCTGGTGCAGAGGCCCAACTCAGGTCTGCTGGCAGGACTGT
GGGAGTTCCCGTCCGTGACCTGGGAGCCCTCAGAGCAGCTTCAGCGCAAGGCCCTGCTGCAGGAACTACA
GCGTTGGGCTGGGCCCCTCCCAGCCACGCACCTCCGGCACCTTGGGGAGGTTGTCCACACCTTCTCTCAC
ATCAAGCTGACATATCAAGTATATGGGCTGGCCTTGGAAGGGCAGACCCCAGTGACCACCGTACCACCAG
GTGCTCGCTGGCTGACGCAGGAGGAATTTCACACCGCAGCTGTTTCCACCGCCATGAAAAAGGTTTTCCG
TGTGTATCAGGGCCAACAGCCAGGGACCTGTATGGGTTCCAAAAGGTCCCAGGTGTCCTCTCCGTGCAGT
CGGAAAAAGCCCCGCATGGGCCAGCAAGTCCTGGATAATTTCTTTCGGTCTCACATCTCCACTGATGCAC
ACAGCCTCAACAGTGCAGCCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201376 representing NM_001048174
Red=Cloning site Green=Tags(s)

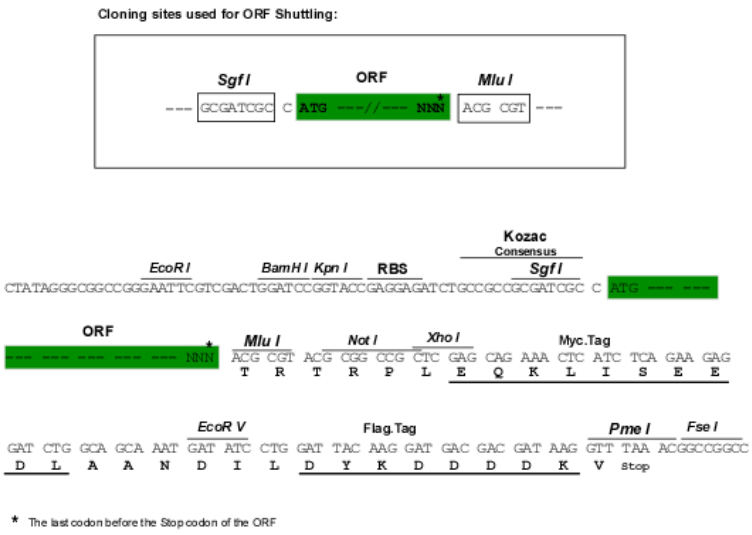
MRKPRAAVGSGHRKQAASQEGRQKHAKNNSQAKPSACDGLARQPEEVVLQASVSSYHLFRDVAEVTAFRG
SLLSWYDQEKRDLPWRRRAEDEMDLDRRAYAVWVSEVMLQQTQVATVINYYTGWMQKWPTLQDLASASLE
EVNQLWAGLGYYSRGRRLQEGARKVVEELGGHMPRTAETLQQLLPGVGRYTAGAIASIAFGQATGVVDGN
VARVLCRVRAIGADPSSTLVSQQLWGLAQQLVDPARPGDFNQAAMELGATVCTPQRPLCSQCPVESLCRA
RQRVEQEQLLASGSLSGSPDVEECAPNTGQCHLCLPPSEPWDQTLGVVNFPRKASRKPPREESSATCVLE
QPGALGAQILLVQRPNSGLLAGLWEFPSVTWEPSEQLQRKALLQELQRWAGPLPATHLRHLGEVVHTFSH
IKLTYQVYGLALEGQTPVTTVPPGARWLTQEEFHTAAVSTAMKKVFRVYQGQQPGTCMGSKRSQVSSPCS
RKKPRMGQQVLDNFFRSHISTDAHSLNSAAQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001048174

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001048174.2

RefSeq Size: 1710 bp

RefSeq ORF: 1566 bp

Locus ID: 4595

UniProt ID: Q9UIF7

Cytogenetics: 1p34.1

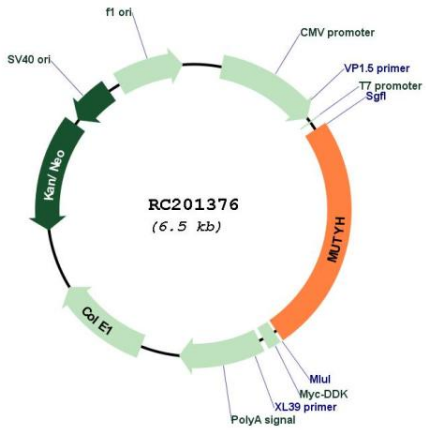
Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Base excision repair

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 RC201376