

Product datasheet for MR204343

Tyms (BC020139) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tyms (BC020139) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tyms
Synonyms:	TS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204343 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGTGGTTGGCTCCGAGCTGCAGTCCGATGCTCAGCAGCTGAGCGCGGAAGCCCCGCAGCATGGAG
AACTCCAGTACCTGAGGCAGGTGGAACACATTTTGCCTGCGGCTTCAAGAAGGAGGACCGCACGGGCAC
AGGCACCCTGTCGGTGTTCGGCATGCAGGCACGATACAGCCTGAGAGATGAATTTCTCTGCTCACAAACC
AAACGAGTGTCTGGAAGGTGTTTTGGAGGAGTTGTTGTGTTTATCAAGGGATCCACAAATGCTAAAG
AATTGTCTCCAAGGGAGTGAGAATCTGGGATGCCAATGGATCCCGAGATTTTCTGGACAGCTTGGGATT
TTCTGCCCCGACAGGAAGGGGACCTGGGCCAGTTTATGTTTCCAATGGAGGCATTTTGGAGCAGAGTAC
AAAGATATGGATTGAGTTACTCGGGACAAGGAGTAGACCAGCTGCAAAAAGTGATTGACACCATCAAAA
CCAACCCTGATGACAGAAGAATCATCATGTGTGCCTGGAACCCAAAAGATCTTCCCTGATGGCACTGCC
TCCTTGCCATGCCCTCTGTCAAGTCTATGTGGTGAATGGGAACTGTCTTGCCAGCTTTACCAGAGGTCA
GGAGATATGGGTCTGGGCGTGCCCTTCAACATTGCCAGCTATGCTCTGCTCACCTACATGATTGCACATA
TCACAGGCCTGCAGCCAGGTGATTTTGTCCACACTTTGGGAGATGCACATATTTACCTGAATCATATAGA
GCCGCTGAAAATTCAGCTACAGCGAGAACAAGACCTTTCCCAAAGCTCAAAATCCTTCGAAAAGTTGAG
ACAATCGATGATTTCAAAGTTGAAGACTTTCAGATTGAAGGTAATCCACATCCAACGATTAATAATGG
AAATGGCTGTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204343 protein sequence
 Red=Cloning site Green=Tags(s)

MLVVGSELQSDAQQLSAEAPQHGELQYLRQVEHILRCGFKKEDRTGTGTLVFGMQARYSLRDEFPLLT
 KRVPFWKGVLEELLWFIKGSTNAKELSSKGVRIWDANGSRDFLDSLGF SARQEGDLGPVYGFQWRHFGAEY
 KDMDSYSGQGV DQLQKVIDTIKTNPDDRRRIIMCAWNPKDLPLMALPPCHALCQFYVVGELSCQLYQRS
 GDMGLGVPFNIA SYALLTYMIAHITGLQPGDFVHTLGDAHIYLNHIEPLKIQLQREPRPFKLIKILRKVE
 TIDDFKVEDFQIEGYNPHPTIKMEMAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: BC020139

ORF Size: 921 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: [BC020139](#), [AAH20139](#)

RefSeq Size: 986 bp

RefSeq ORF: 923 bp

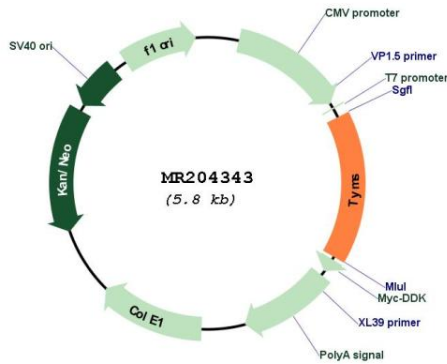
Locus ID: 22171

Cytogenetics: 5 15.81 cM

MW: 34.9 kDa

Gene Summary: This gene encodes an enzyme that catalyzes the methylation of deoxyuridylate to deoxythymidylate using 5,10-methylenetetrahydrofolate as a cofactor. This function maintains the thymidine-5-prime monophosphate concentration critical for DNA replication and repair. The encoded enzyme is a target for cancer chemotherapeutic agents. The majority of transcripts for this gene lack a 3' UTR (PMID: 3022294, 3444407). The stop codon in these transcripts is UAA, compared to the UAG found in the genome and longer transcripts, as the polyA site is located within the stop codon (PMID: 3444407, 2157203). A related pseudogene has been identified on chromosome 10. [provided by RefSeq, Mar 2010]

Product images:



Circular map for MR204343