

Product datasheet for **MG204343**

Tyms (BC020139) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tyms (BC020139) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tyms
Synonyms:	TS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204343 representing BC020139 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGTGGTTGGCTCCGAGCTGCAGTCCGATGCTCAGCAGCTGAGCGCGGAAGCCCCGCAGCATGGAG
AACTCCAGTACCTGAGGCAGGTGGAACACATTTGCGCTGCGGCTTCAAGAAGGAGGACCGCACGGGCAC
AGGCACCCTGTCGGTGTTCGGCATGCAGGCACGATACAGCCTGAGAGATGAATTTCTCTGCTCACAAACC
AAACGAGTGTTCTGGAAGGGTGTGGAGGAGTTGTTGTGTTTATCAAGGGATCCACAAATGCTAAAG
AATTGTCTCCAAGGGAGTGAGAATCTGGGATGCCAATGGATCCCGAGATTTCTGGACAGCTTGGGATT
TTCTGCCCCGACAGGAAGGGGACCTGGGCCAGTTTATGTTTCCAATGGAGGCATTTGGAGCAGAGTAC
AAAGATATGGATTGAGTTACTCGGGACAAGGAGTAGACCAGCTGCAAAAAGTGATTGACACCATCAAAA
CCAACCCTGATGACAGAAGAATCATATGTGTGCCTGGAACCCAAAAGATCTTCCCTGATGGCACTGCC
TCCTTGCCATGCCCTCTGTCAAGTTCTATGTGGTGAATGGGAACTGTCTTGCCAGCTTACCAGAGGTCA
GGAGATATGGGTCTGGGCGTGCCCTTCAACATTGCCAGCTATGCTCTGCTCACCTACATGATTGCACATA
TCACAGGCCTGCAGCCAGGTGATTTGTCCACACTTTGGGAGATGCACATATTTACCTGAATCATATAGA
GCCGCTGAAAATTCAGCTACAGCGAGAACCAAGACCTTTCCCAAAGCTCAAAATCCTTCGAAAAGTTGAG
ACAATCGATGATTTCAAAGTTGAAGACTTTCAGATTGAAGGTATAATCCACATCCAACGATTAATAATGG
AAATGGCTGTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG204343 representing BC020139
 Red=Cloning site Green=Tags(s)

MLVVGSELQSDAQQLSAEAPQHGELQYLRQVEHILRCGFKKEDRTGTGTLVFGMQARYSLRDEFPLLT
 KRVPFWKGVLEELLWFIKGSTNAKELSSKGVRIWDANGSRDFLDSLGF SARQEGDLGPVYGFQWRHFGAEY
 KDMDSYSGQGV DQLQKVIDTIKTNPDDRRRIIMCAWNP KDLPLMALPPCHALCQFYVVGELSCQLYQRS
 GDMGLGVPFNIA SYALLTYMIAHITGLQPGDFVHTLGD AHIYLNHIEPLKIQ LQREPRPF PKLKILRKVE
 TIDDFKVEDFQIEGYNPHPTIKMEMAV

TRTRPLE - GFP Tag - V

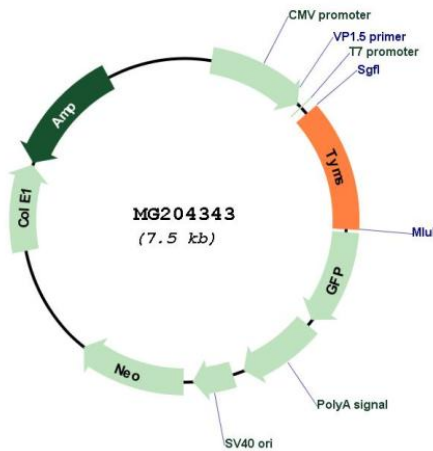
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: BC020139

ORF Size: 923 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:	<ol style="list-style-type: none">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
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]