

Product datasheet for **MG225051**

Tyms (NM_021288) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tyms (NM_021288) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tyms
Synonyms:	T; Ts
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225051 representing NM_021288 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGCTGGTGGTTGGCTCCGAGCTGCAGTCCGATGCTCAGCAGCTGAGCGCGGAAGCCCCACGGCATGGAG
AACTCCAGTACCTGAGGCAGGTGGAGCACATTTGCGCTGCGGCTTCAAGAAGGAGGACCGCACGGGCAC
TGGCACCTGTCGGTGTTCGGCATGCAGGCACGATACAGCCTGAGAGATGAATTTCTCTGCTCACAAACC
AAACGAGTGTCTGGAAGGGTGTTCGGAGGAGTTGTTGTGTTTATCAAGGGATCCACAAATGCTAAAG
AATTGTCCTCAAAGGGAGTGAGAATCTGGGATGCCAATGGATCCCGAGATTTCTGGACAGCTTGGGATT
TTCTGCCCCGACAGGAAGGGGACCTGGGCCAGTTTATGTTTCCAATGGAGGCATTTGGAGCAGAGTAC
AAAGATATGGATTGAGTACTCGGGACAAGGAGTAGACCAGCTGCAAAAAGTGATTGACACCATCAAAA
CCAACCCTGATGACAGAAGAATCATCATGTGTGCCTGGAACCCAAAAGATCTTCCCTGATGGCACTGCC
TCCTTGCCATGCCCTCTGTCAAGTCTATGTGGTGAATGGGAACTGTCTTGCCAGCTTACCAGAGGTCA
GGAGATATGGGTCTGGGCGTGCCCTTCAACATTGCCAGCTATGCTCTGCTCACCTACATGATTGCACATA
TCACAGGCCTGCAGCCAGGTGATTTGTCCACACTTTGGGAGATGCACATATTTACCTGAATCATATAGA
GCCGCTGAAAATTCAGCTACAGCGAGAACCAAGACCTTTCCCAAAGCTCAAAATCCTTCGAAAAGTTGAG
ACAATCGATGATTTCAAAGTTGAAGACTTTCAGATTGAAGGTATAATCCACATCCAACGATTAATAATGG
AAATGGCTGTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG225051 representing NM_021288
 Red=Cloning site Green=Tags(s)

MLVVGSELQSDAQQLSAEAPRHGELQYL RQVEHILRCGFKKEDRTGTGTL SVFGMQARYSLRDEFPLLT
 KR VFWKGVLEELLWFIKGSTNAKELSSKGVRIWDANGSRDFLDSLGF SARQEGDLGPVYGFQWRHFGAEY
 KDMDSYSGQGV DQLQKVIDTIKTNPDDRRRIIMCAWNP KDLPLMALPPCHALCQF YVVGELSCQLYQRS
 GDMGLGVPFN IASYALLTYMIAHITGLQPGDFVHTLGD AHIYLNHIEPLKIQ LQREPRPF PKLKILRKVE
 TIDDFKVEDFQIEGYNPHPTIKMEMAV

TRTRPLE - GFP Tag - V

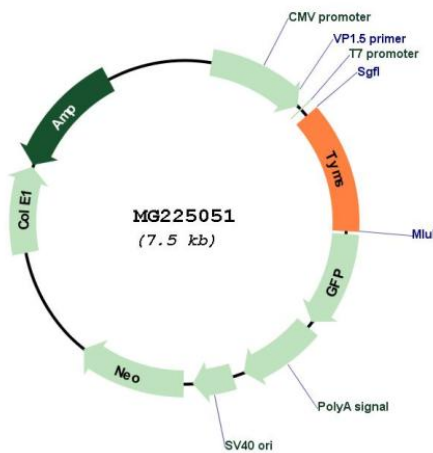
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_021288

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:	<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:	NM_021288.4 , NP_067263.1
RefSeq Size:	3798 bp
RefSeq ORF:	924 bp
Locus ID:	22171
UniProt ID:	P07607
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]