

Product datasheet for **MG202963**

Tpmt (NM_016785) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Tpmt (NM_016785) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Tpmt
Synonyms: AW106912
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG202963 representing NM_016785
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCCTTGATATGAAAGAGCACCCCTGATGCTGAGGTACAAAAGAACCAAGTACTAACCCCTGGAAGACT
 GGAAAGAGAAGTGGGTGACCCGTCACATCTCATTCCATCAGGAGCAAGGGCATCAGCTATTAAGAAGCA
 TTTGGATACATTTCTAAAGGCCAGAGTGGACTGCGAGTGTTCCTCCCTCTGTGGAAAAGCCATTGAG
 ATGAAATGGTTCGCAGATCGGGCCACACTGTAGTTGGTGTGAAATCAGTGAAATTGGGATTCGGGAAT
 TTTTTCAGAACAGAATCTTCTACACAGAAGAACCCTCGCCGAAATTGCTGGAGCCAAAGTATTTAA
 GAGTTCTTCAGGGAGCATTTCTTATACTGCTGCAGCATATTTGATCTTCTAGAGCAAACATTGGCAAG
 TTTGACAGGATTTGGGATAGAGGAGCATTAGTGGCTATCAATCCAGGCGATCATGATCGCTATGCAGATA
 TAATACTGTCCCTACTGAGAAAAGATTTAGTACCTCGTGGCTGTCTTTCTTATGATCCAACAAAACA
 CGCAGGCCACCATTTTATGTTCCATCTGCTGAACTTAAAAGGTTATTTGGTACAAAATGCAGCATGCAA
 TGCCTTGAAGAGGTAGACGCTTTTGAAGAAAGGCATAAAGCCTGGGGTCTTGACTACCTTTTAAAAAT
 TGTATCTCCTTACAGAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG202963 representing NM_016785
Red=Cloning site Green=Tags(s)

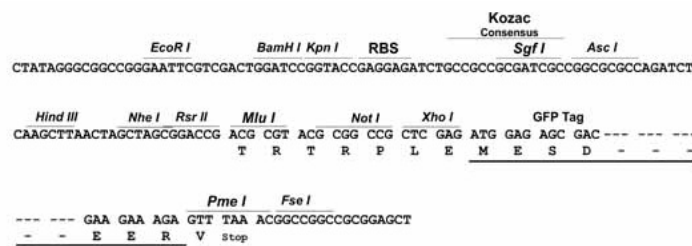
MSLDMKEHPDAEVQKNQVL TLEDWKEKWVTRHISFHQEQQHQLLKKHLDTFLKGGQSLRVFFPLCGKAIE
 MKWFADRGHTVVGVEISEIGIREFFAEQNL SYTEEPLAEIAGAKVFKSSSGSISLYCCSIFDLPRANIGK
 FDRIWDRGALVAINPGDHDRYADIIL SLLRKEFQYL VAVLSYDPTKHAGPPFYVPSAELKRLFGTKCSMQ
 CLEEVDALEERHKAWGLDYLF EKLYLLTEK

TRTRPLE - GFP Tag - V

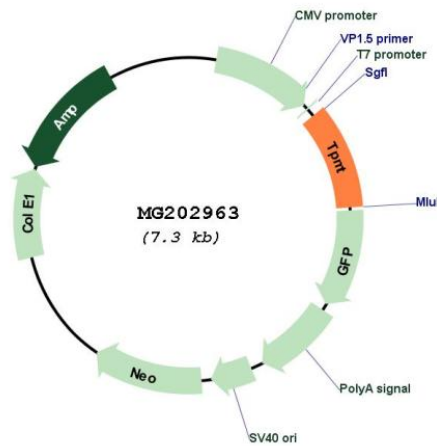
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_016785

ORF Size: 720 bp

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|-------------------------------|---|
| 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_016785.1 , NP_058065.1 |
| RefSeq Size: | 1068 bp |
| RefSeq ORF: | 723 bp |
| Locus ID: | 22017 |
| UniProt ID: | O55060 |
| Cytogenetics: | 13 24.5 cM |
| Gene Summary: | Catalyzes the S-methylation of thiopurine drugs such as 6-mercaptopurine (also called mercaptopurine, 6-MP or its brand name Purinethol) using S-adenosyl-L-methionine as the methyl donor (PubMed:18484748). TPMT activity modulates the cytotoxic effects of thiopurine prodrugs. A natural substrate for this enzyme has yet to be identified. [UniProtKB/Swiss-Prot Function] |