

## Product datasheet for **MR202963**

### **Tpmt (NM\_016785) Mouse Tagged ORF Clone**

#### **Product data:**

**Product Type:** Expression Plasmids  
**Product Name:** Tpmt (NM\_016785) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Tpmt  
**Synonyms:** AW106912  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR202963 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCCTTGATATGAAAGAGCACCCCTGATGCTGAGGTACAAAAGAACCAAGTACTAACCCCTGGAAGACT  
GGAAAGAGAAGTGGGTGACCCGTCACATCTCATTCCATCAGGAGCAAGGGCATCAGCTATTAAGAAGCA  
TTTGGATACATTTCTAAAGGCCAGAGTGGACTGCGAGTGTTCCTCCCTCTGTGGAAAAGCCATTGAG  
ATGAAATGGTTCGCAGATCGGGCCACACTGTAGTTGGTGTGAAATCAGTGAAATTGGGATTCGGGAAT  
TTTTTGCAGAACAGAATCTTCTACACAGAAGAACCCTCGCCGAAATTGCTGGAGCAAAGTATTTAA  
GAGTTCTTCAGGGAGCATTTCTTATACTGCTGCAGCATATTTGATCTTCTAGAGCAAACATTGGCAAG  
TTTGACAGGATTTGGGATAGAGGAGCATTAGTGGCTATCAATCCAGGCGATCATGATCGCTATGCAGATA  
TAATACTGTCCCTACTGAGAAAAGATTTAGTACCTCGTGGCTGTCTTTCTTATGATCCAACAAAACA  
CGCAGGCCACCATTTTATGTTCCATCTGCTGAACTAAAAGGTTATTTGGTACAAAATGCAGCATGCAA  
TGCCTTGAAGAGGTAGACGCTTTTGAAGAAAGGCATAAAGCCTGGGGTCTTGACTACCTTTTAAAAAT  
TGATCTCCTTACAGAGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR202963 protein sequence  
Red=Cloning site Green=Tags(s)

MSLDMKEHPDAEVQKNQVL TLEDWKEKWVTRHISFHQEQQHQLLKKHLDTFLKGQSGLRVFFPLCGKAIE  
 MKWFADRGHTVVGVEISEIGIREFFAEQNL SYTEEPLAEIAGAKVFKSSSGSISLYCCSIFDLPRANIGK  
 FDRIWDRGALVAINPGDHDRYADIIL SLLRKEFQYL VAVLSYDPTKHAGPPFYVPSAELKRLFGTKCSMQ  
 CLEEVDALEERHKAWGLDYLF EKLYLLTEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_016785

**ORF Size:** 723 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:** [NM\\_016785.1](#), [NP\\_058065.1](#)

**RefSeq Size:** 2715 bp

**RefSeq ORF:** 723 bp

**Locus ID:** 22017

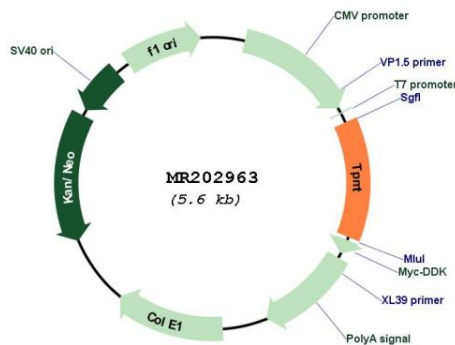
**UniProt ID:** [O55060](#)

**Cytogenetics:** 13 24.5 cM

**MW:** 27.6 kDa

**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]

## Product images:



Circular map for MR202963