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Product datasheet for RG203309

TPMT (NM_000367) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TPMT (NM_000367) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TPMT
Synonyms:	TPMTD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG203309 representing NM_000367
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATGGTACAAGAACTTCACTTGACATTGAAGAGTACTCGGATACTGAGGTACAGAAAAACCAAGTAC
TAACTCTGGAAGAATGGCAAGACAAGTGGGTGAACGGCAAGACTGCTTTTCATCAGGAACAAGGACATCA
GCTATTAAAGAAGCATTTAGATACTTTCCTTAAAGGCAAGAGTGGACTGAGGGTATTTTTTCCTCTTTGC
GGAAAAGCGGTTGAGATGAAATGGTTTGCAGACCGGGGACACAGTGTAGTTGGTGTGGAAATCAGTGAAC
TTGGGATACAAGAATTTTTTACAGAGCAGAATCTTTCTTACTCAGAAGAACCAATCACCGAAATTCCTGG
AACCAAAGTATTTAAGAGTTCTTCGGGGAACATTTCATTGTACTGTTGCAGTATTTTTGATCTTCCCAGG
ACAAATATTGGCAAATTTGACATGATTTGGGATAGAGGAGCATTAGTTGCCATTAATCCAGGTGATCGCA
AATGCTATGCAGATACAATGTTTTCCCTCCTGGGAAAGAAGTTTCAGTATCTCCTGTGTGTTCTTTCTTA
TGATCCAACTAAACATCCAGGTCCACCATTTTATGTTCCACATGCTGAAATTGAAAGGTTGTTTGGTAAA
ATATGCAATATACGTTGTCTTGAGAAGGTTGATGCTTTTGAAGAACGACATAAAAGTTGGGGAATTGACT
GTCTTTTTGAAAAGTTATATCTACTTACAGAAAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

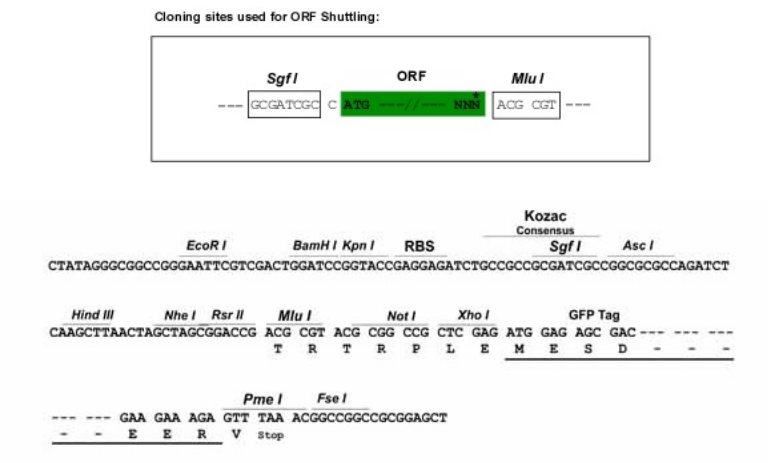
>RG203309 representing NM_000367
Red=Cloning site Green=Tags(s)

MDGTRTSLDIEEYSDTEVQKNQVLTLEEWQDKWVNGKTAFHQEQGHQLLKKHLDTFLKGKSGLRVFFPLC
GKAVEMKWFADRGHSVVGVEISELGIQEFFTEQNLSYSEEPITEIPGTKVFKSSSGNISLYCCSIFDLPR
TNIGKFDMIWDRGALVAINPGDRKCYADTMFSLLGKKFQYLLCVLSYDPTKHPGPPFYVPHAEIERLFGK
ICNIRCLEKVDAFEERHKSWGIDCLFEKLYLLTEK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000367

ORF Size: 735 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_000367.4

RefSeq Size: 3258 bp

RefSeq ORF: 738 bp

Locus ID: 7172

UniProt ID: P51580

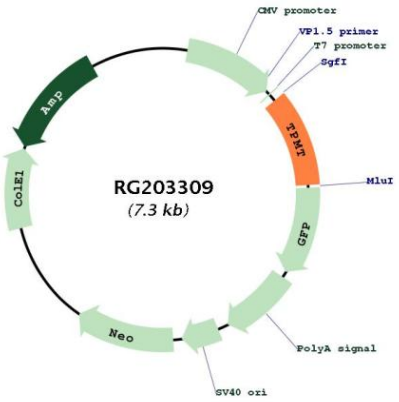
Cytogenetics: 6p22.3

Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - other enzymes

Gene Summary: This gene encodes the enzyme that metabolizes thiopurine drugs via S-adenosyl-L-methionine as the S-methyl donor and S-adenosyl-L-homocysteine as a byproduct. Thiopurine drugs such as 6-mercaptopurine are used as chemotherapeutic agents. Genetic polymorphisms that affect this enzymatic activity are correlated with variations in sensitivity and toxicity to such drugs within individuals, causing thiopurine S-methyltransferase deficiency. Related pseudogenes have been identified on chromosomes 3, 18 and X. [provided by RefSeq, Aug 2014]

Product images:



Circular map for RG203309