

Product datasheet for **RG201324**

UMPS (NM_000373) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UMPS (NM_000373) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	UMPS
Synonyms:	OPRT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG201324 representing NM_000373
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGTGCTCGTGCAGCTTTGGGGCCATTGGTGACGGGTCTGTACGACGTGCAGGCTTTCAGTTTG
 GGGACTTCGTGCTGAAGAGCGGGCTTTCCTCCCCATCTACATCGATCTGCGGGGATCGTGTCTGACC
 CGGTCTTCTGAGTCAGGTTGCAGATATTTTATTCCAAACTGCCAAAATGCAGGCATCAGTTTTGACACC
 GTGTGTGGAGTGCCTTATACAGCTTTGCCATTGGCTACAGTTATCTGTTCAACCAATCAAATCCAAATGC
 TTATTAGAAGGAAAGAAACAAAGGATTATGGAATAAGCGTCTTGTAGAAGGAATTAATCCAGGAGA
 AACCTGTTAATCATTGAAGATGTTGTACCAGTGGATCTAGTGTGTTGGAACTGTTGAGGTTCTTCAG
 AAGGAGGGCTGAAGTCACTGATGCCATAGTGTGTTGGACAGAGAGCAGGGAGGCAAGGACAAGTTGC
 AGGCGCACGGATCCGCCTCCACTCAGTGTGTACATTGCCAAAATGCTGGAGATTCTCGAGCAGCAGAA
 AAAAGTTGATGCTGAGACAGTTGGGAGAGTGAAGAGGTTTATTCCAGGAGAATGTCTTTGTCGAGCGAAT
 CATAATGGTTCTCCCCTTCTATAAAGGAAGCACCCAAAGAACTCAGCTTCGGTGCACGTGCAGAGCTGC
 CCAGGATCCACCCAGTTGCATCGAAGCTTCTCAGGCTTATGCAAAAAGAAGGAGACCAATCTGTGTCTATC
 TGCTGATGTTTACTGGCCAGAGAGCTGTTGCAGCTAGCAGATGCTTTAGGACCTAGTATCTGCATGCTG
 AAGACTCATGTAGATATTTGAATGATTTACTCTGGATGTGATGAAGGAGTTGATAACTCTGGCAAAAT
 GCCATGAGTCTTGATATTTGAAGACCGGAAGTTTGCAGATATAGGAAACACAGTGAAAAAGCAGTATGA
 AGGAGGTATCTTAAAAAGTCTTCTGGCAGATCTAGTAAATGCTCACGTGGTCCAGGCTCAGGAGTT
 GTGAAAGGCCTGCAAGAAGTGGGCTGCCTTTCATCGGGGTGCCTCCTATTGCGGAAATGAGCTCCA
 CCGGCTCCCTGGCCACTGGGACTACACTAGACAGCGGTTAGAATGGCTGAGGAGCACTGAATTTGT
 TGTTGGTTTTATTCTGGCTCCCGAGTAAGCATGAAACCAGAATTTCTTCACTTGACTCCAGGAGTTCAG
 TTGGAAGCAGGAGGAGATAATCTTGCCAACAGTACAATAGCCCAAGAAGTTATTGGCAACGAGGTT
 CCGATATCATCATTGTAGGTCGTGGCATAATCTCAGCAGCTGATCGTCTGGAAGCAGCAGAGATGTACAG
 AAAAGCTGCTTGGGAAGCGTATTTGAGTAGACTTGGTGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG201324 representing NM_000373
 Red=Cloning site Green=Tags(s)

MAVARAALGPLVTGLYDVQAFKFGDFVLKSGLSSPIYIDLRGIVSRPRLLSQVADILFQTAQNAGISFDT
 VCGVPYALPLATVICSTNQIPMLIRRKETKDYGTKRLVEGTINPGETCLIIEDVVTSGSSVLETVEVLQ
 KEGLKVTDAIVLLDREQGGKDKLQAHGIRLHSVCTLSKMLEILEQQKKVDAETVGRVSRF IQENFVAAN
 HNGSPLSIKEAPKELSFGARAEIPRIHPVASKLLRLMQKKTENLCL SADVSLARELLQLADALGPSICML
 KTHVDILNDFTLDMKELITLAKCHEFLIFEDRKFADIGNTVKKQYEGGIFKIASWADLVNAHVVPGSV
 YKGLQEVGLPLHRGCLLIAEMSSTGSLATGDYTRAAVRMAEHESEFVVGFI SGRVSMKPEFLHLTPGVQ
 LEAGGDNLGQYNSPQEVIGKRGSDIIIVRGIISAADRLEAAEMYRKAWEAYLSRLGV

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_000373

ORF Size: 1440 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_000373.4](#)

RefSeq Size: 2244 bp

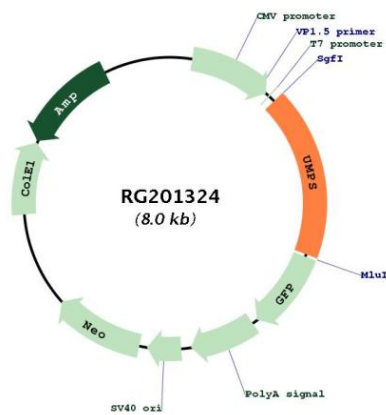
RefSeq ORF: 1443 bp

Locus ID: 7372

UniProt ID: [P11172](#)

Cytogenetics:	3q21.2
Domains:	Pribosyltran, OMPdecase
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - other enzymes, Metabolic pathways, Pyrimidine metabolism
Gene Summary:	This gene encodes a uridine 5'-monophosphate synthase. The encoded protein is a bifunctional enzyme that catalyzes the final two steps of the de novo pyrimidine biosynthetic pathway. The first reaction is carried out by the N-terminal enzyme orotate phosphoribosyltransferase which converts orotic acid to orotidine-5'-monophosphate. The terminal reaction is carried out by the C-terminal enzyme OMP decarboxylase which converts orotidine-5'-monophosphate to uridine monophosphate. Defects in this gene are the cause of hereditary orotic aciduria. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Mar 2010]

Product images:



Circular map for RG201324