OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG202960

QPRT (NM_014298) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	QPRT (NM_014298) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	QPRT
Synonyms:	HEL-S-90n; QPRTase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG202960 representing NM_014298
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACGCTGAAGGCCTGGCGCTGCTGCTGCCGCCCGTCACCCTGGCAGCCCTGGTGGACAGCTGGCTCC
GAGAGGACTGCCCAGGGCTCAACTACGCAGCCTTGGTCAGCGGGGCAGGCCCCTCGCAGGCGGCGCTGTG
GGCCAAATCCCCTGGGATACTGGCAGGGCAGCCTTTCTTCGATGCCATATTTACCCAACTCAACTGCCAA
GTCTCCTGGTTCCTCCCCGAGGGATCGAAGCTGGTGCCGGTGGCCAGAGTGGCCGAGGTCCGGGGCCCTG
CCCACTGCCTGCTGCTGGGGGAACGGGTGGCCCTCAACACGCTGGCCCGCTGCAGTGGCATTGCCAGTGC
TGCCGCCGCTGCAGTGGAGGCCGCCAGGGGGGCCGGCTGGACTGGGCACGTGGCAGGCACGAGGAAGACC
ACGCCAGGCTTCCGGCTGGTGGAGAAGTATGGGCTCCTGGTGGGCGGGGCCGCCTCGCACCGCTACGACC
TGGGAGGGCTGGTGATGGTGAAGGATAACCATGTGGTGGCCGCCGGTGGCGTGGAGAAGGCGGTGCGGGC
GGCCAGACAGGCGGCTGACTTCGCTCTGAAGGTGGAAGTGGAATGCAGCAGCCTGCAGGAGGCCGTGCAG
GCAGCTGAGGCTGGTGCCGACCTTGTCCTGCTGGACAACTTCAAGCCAGAGGAGCTGCACCCCACGGCCA
CCGTGCTGAAGGCCCAGTTCCCGAGTGTGGCTGTGGAAGCCAGTGGGGGCATCACCCTGGACAACCTCCC
CCAGTTCTGCGGGCCGCACATAGACGTCATCTCCATGGGGATGCTGACCCAGGCGGCCCCAGCCCTTGAT
TTCTCCCTCAAGCTGTTTGCCAAAGAGGTGGCTCCAGTGCCCAAAATCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

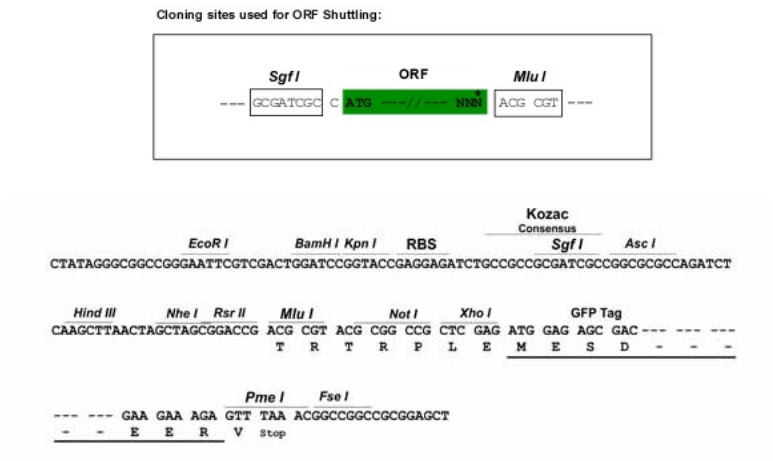
>RG202960 representing NM_014298
Red=Cloning site Green=Tags(s)

MDAEGLALLLPPVTLAALVDSWLREDCPGLNYAALVSGAGPSQAALWAKSPGILAGQPFFDAIFTQLNCQ
VSWFLPEGSKLVPVARVAEVRGPAHCLLLGERVALNTLARCSGIASAAAAAVEAARGAGWTGHVAGTRKT
TPGFRLVEKYGLLVGGAASHRYDLGGLVMVKDNHVVAAGGVEKAVRAARQAADFALKVEVECSSLQEAVQ
AAEAGADLVLLDNFKPEELHPTATVLKAQFPSVAVEASGGITLDNLPQFCGPHIDVISMGMLTQAAPALD
FSLKLFAKEVAPVPKIH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014298

ORF Size: 891 bp

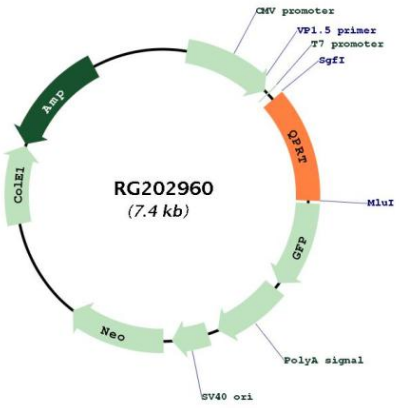
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_014298.3, NP_055113.2
RefSeq Size:	1575 bp
RefSeq ORF:	894 bp
Locus ID:	23475
UniProt ID:	Q15274
Cytogenetics:	16p11.2
Domains:	QRPTase
Protein Pathways:	Metabolic pathways, Nicotinate and nicotinamide metabolism
Gene Summary:	This gene encodes a key enzyme in catabolism of quinolinate, an intermediate in the tryptophan-nicotinamide adenine dinucleotide pathway. Quinolinate acts as a most potent endogenous exitotoxin to neurons. Elevation of quinolinate levels in the brain has been linked to the pathogenesis of neurodegenerative disorders such as epilepsy, Alzheimer's disease, and Huntington's disease. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RG202960