

## Product datasheet for **SC319149**

### QPRT (NM\_014298) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** QPRT (NM\_014298) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** QPRT  
**Synonyms:** HEL-S-90n; QPRTase  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC (PS100020)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_014298.3  
 CACCAGCCCAGACAGCTGCAAGTCACCATGGACGCTGAAGGCCTGGCGCTGCTGCTGCCG  
 CCCGTACCCTGGCAGCCCTGGTGGACAGCTGGCTCCGAGAGGACTGCCAGGGCTCAAC  
 TACGCAGCCTTGGTCAGCGGGGCAGGCCCTCGCAGGCGCGCTGTGGCCAAATCCCCT  
 GGGATACTGGCAGGGCAGCCTTTCTTCGATGCCATATTTACCAACTCAACTGCCAAGTC  
 TCCTGGTTCCTCCCCGAGGGATCGAAGCTGGTGGCGGTGGCCAGAGTGGCCGAGGTCCGG  
 GGCCCTGCCACTGCCTGCTGCTGGGGAACGGGTGGCCCTCAACACGCTGGCCCGCTGC  
 AGTGGCATTGCCAGTGTGCCGCCGCTGCAGTGGAGGCCGCCAGGGGGCCGGCTGGACT  
 GGGCACGTGGCAGGCACGAGGAAGACCACGCCAGGCTTCCGGCTGGTGGAGAAGTATGGG  
 CTCCTGGTGGGCGGGCCGCTCGCACCCTACGACCTGGGAGGGCTGGTGTGGTGAAG  
 GATAACCATGTGGTGGCCGCCGGTGGCGTGAGAAAGCGGTGCGGGCGGCCAGACAGGCG  
 GCTGACTTCGCTTGAAGGTGGAAGTGAATGCAGCAGCCTGCAGGAGGCCGTGCAGGCA  
 GCTGAGGCTGGTCCGACCTTGTCTGCTGGACAATTCAAGCCAGAGGAGCTGCACCCC  
 ACGGCCACCGTGTGAAGGCCAGTTCCCGAGTGTGGCTGTGGAAGCCAGTGGGGGCATC  
 ACCCTGGACAACCTCCCCAGTTCTGCGGGCCGCACATAGACGTCATCTCCATGGGGATG  
 CTGACCCAGGCGGCCAGCCCTTGATTCTCCCTCAAGCTGTTTGCCAAAGAGGTGGCT  
 CCAGTGCCAAAATCCACTAGTCTAAACCGGAAGAGGATGACACCGCCATGGGTTAAC  
 GTGGCTCTCAGGACCCCTCTGGTCAACATCTTTAGGGTCAGTGGCCAAATGGGGACAT  
 TTGGCACTAGCTTGAGCCCAACTCTGGCTCTGCCACCTGCTCCTGTGACCTGTGACG  
 GCTGACTTCACCTCTGCTCATCTCAGTTTCTTAATCTGTAATAATGGGTCTAATAAAGGAT  
 CAACCACATGGGGTTCTGCGGTGATAATGAGCACATAGTGGGGTCCAGCAAATGTCAGA  
 AGTTACCTGGGACAGCCGGGCACGATGGCTCACACCTGTAATCCCAGCACTTTGGGAGGC  
 TGAGGCGGAAGATCACTTGAGTTTCAAGGAGTTTGGAGCCAGCCTGGCCAACATGGTGAAA  
 CCCCATCTCTACCAAAAAATAGAAGAAATTAGCTGGGTGTGGTGGCACGCGCCTGTAATCCC  
 AGCTACTTAGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAAGTGGAGGTTGCAGTG  
 AGCTGATGGTCCACTGCACTCCAGCCTGGGTGATAGAGCGAGACTCTGTCTCCAAGAA  
 GAAACAAAAAAAAAAAAAAAAAAAAA



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<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_014298
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_014298.3</a> , <a href="#">NP_055113.2</a>
<b>RefSeq Size:</b>	1575 bp
<b>RefSeq ORF:</b>	894 bp
<b>Locus ID:</b>	23475
<b>UniProt ID:</b>	<a href="#">Q15274</a>
<b>Cytogenetics:</b>	16p11.2
<b>Domains:</b>	QRPTase
<b>Protein Pathways:</b>	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 excitotoxin 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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).