

## Product datasheet for **RG230647**

### **VAR2 (NM\_001167734) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** VAR2 (NM\_001167734) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** VAR2  
**Synonyms:** COXPD20; VALRS; VAR2L; VARSL  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG230647 representing NM\_001167734  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGGGCGGAAGGCTTGGCCGCGCCGGCTGTGGCACTGCAGGAGGCCCTGTGCAGAACAGATCTCGG  
 CCCCTTCCAAACTCCTGATGCCTCATTTCCTCTCGCCTCTTTTCGACCACCATTTGGGGCTGAG  
 GCACTCACGGGGCTCCCAGGTTTCACTCCGTTTCTACACAGTCGGAGCCCCATGGATCTCCCATCTCC  
 CGGAGGAACCGTGAAGCCAAACAGAAGCGCTGCGAGAGAAGCAGGCGACTCTGGAGGCTGAGATAGCAG  
 GGGAGAGCAAGTCACCTGCAGAATCCATTAAGGCCTGGAGGCCTAAGGAGTTAGTATTGTATGAAATCCC  
 TACGAAACCCGGTAAAAGAAAGATGTCTCTGGGCCCTGCCTCCTGCATACAGCCCCGATATGTTGAG  
 GCTGCCTGGTACCGTGGTGGTACGAGAGGGCTTCTCAAACAGAAATACAGGCCCGGCTGCCCAAG  
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GTACTGCCCATCTGCAGCCGTTCTGGGGATGTGATAGAATACCTGCTGAAGAACCAGTGGTTTGTCCGCT
GCCAGGAAATGGGGGCCGAGCTGCCAAGGCTGTGGAGTCGGGGGCCCTGGAGCTCAGTCCCTCCTTCCA
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TCTGTTAGCCCGCCGAAGGTACAAGTTGAGAAGCAGCTTGACAGCCTCACAGCCAGGACCCATCAGAA
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CAGCCTCTCACCTCCGGCAGCTGATGGATGAGCCTCCAGCCCCAGGGAGCCCGGAGCTC
    
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG230647 representing NM\_001167734

Red=Cloning site Green=Tags(s)

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MGGKAWPRRAVGTAGGPCAEQISAPFQTLMLPHLPLASFRPPFWGLRHSRGLPRFHSVSTQSEPHGSPIS
RRNREAKQKRLREKQATLEAEIAGESKSPAESIKAWRPKELVLYEIPKPGKEDVSGPLPPAYSPRYVE
AAWYPWWVREGFFKPEYQARLPQATGETFSMCIPPPNTGSLHIGHALTVAIQDALVRWHRMRGDQVLWV
PGSDHAGIATQAVVEKQLWKERGVRHEL SREAFLEWVQWKEAKGGEICEQLRALGASLDWDRECFMD
VGSSVAVTEAFVRLYKAGLLYRNHQLVNWSCALRSAISDIEVENRPLPGHTQLRLPGCPTPVSFGLLFSV
AFPVDGEPDAEVVVGTTREPETLPGDVAVAVHPDDSRYPHHLHGRQLRHPLMGQPLPLITDYAVQPHVGTGA
VKVTPAHSPPADAEMGARHGLSPLNVIAEDGTMSTSLCGDWLQGLHRFVAREKIMSVLSEWGLFRGLQNHMP
VLPICSRSGDVIEYLLKNQWFVRCQEMGARAAKAVESGALELSPSFHQKNWQHWFSHIGDWCYSRQLWWG
HQIPAYLVVEDHAQGEEDCWVGRSEAEAREVAAELTGRPGAELTLERDPDVLDTWFSALFPFSSALGWP
QETPDLARFYPLSLELETGSDLLLFWVGRMVMLGTQLTGQLPFSKVLHMPVDRQRKMSKSLGNVLDPR
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SCRHFCNKIWNALRFILNALGEKFPVQPAEELSPSSPMDAWILSRLALAAQECERGFRTRELSLVTHALH
HFVHLNLCVYLEAVKPVLWHSRPLGPPQVLFSCADLGLRLLAPLMPFLAEELWQRLPPRPGCPPAPSI
SVAPYPSACSLHWRQPELERRFSRVQEVVQVLRALRATYQLTKARPRVLLQSSEPGDQGLFEAFLEPLG
TLGYCGAVGLLPPGAAAPSGWAQAPLSDTAQVYMEQLGLVDPQIQPLLLAARRYKLLKQLDLSLTARTPSE
GEAGTQRQKLSLQLELSKLDKAASHLRQLMDEPPAPGSPEL
    
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TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI



<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>	<u>NM_001167734.1, NP_001161206.1</u>
<b>RefSeq Size:</b>	3629 bp
<b>RefSeq ORF:</b>	3282 bp
<b>Locus ID:</b>	57176
<b>UniProt ID:</b>	<u>Q5ST30</u>
<b>Cytogenetics:</b>	6p21.33
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis
<b>Gene Summary:</b>	This gene encodes a mitochondrial aminoacyl-tRNA synthetase, which catalyzes the attachment of valine to tRNA(Val) for mitochondrial translation. Mutations in this gene cause combined oxidative phosphorylation deficiency-20, and are also associated with early-onset mitochondrial encephalopathies. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Aug 2014]