

Product datasheet for **RG230585**

VAR2 (NM_001167733) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VAR2 (NM_001167733) 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)



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ORF Nucleotide Sequence:

>RG230585 representing NM_001167733
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTGTATCCACCTCCCAATGTCACTGGCTCCCTGCACATTGGCCACGCACTCACGGTGGCCATACAGG
 ATGCCCTCGTGCCTGGCACCGGATGCGTGGGGATCAAGTGTGTGGTCCCTGGTTCAGATCATGCAGG
 AATTGCTACACAAGCTGTGGTGGAGAAACAAGTGTGAAGGAACGGGGAGTGAGGAGACATGAGCTGAGC
 CGGGAGGCCTTCCTTAGGGAGGTGTGGCAGTGGAAAGGAGCGAAAGGTGGAGAGATCTGTGAGCAGCTGC
 GAGCTCTGGGTGCCTCCCTGGACTGGGATCGAGAGTGTTCACCATGGATGTTGGCTCCTCAGTGGCTGT
 GACTGAAGCTTTTGTGCGGCTCTACAAGCGGGGTTGCTGTACCGGAACCATCAGCTTGTCAACTGGTCA
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 GACTGCCTGGCTGCCCCACCCCGTGTCTTTGGCCTCCTATTTTCTGTTGCCTTCCCCGTGGATGGAGA
 GCCTGATGCAGAGGTTGGTAGGAACCAAGGCCAGAGACGCTGCCTGGAGATGTGGCTGTGGCCGTT
 CATCCAGACGACTCGCGATACACACATCTACACGGGCGACAGCTTCGTCACCCCTTGATGGGGCAGCCTC
 TCCCCCTCATCACAGACTATGCTGTTACGCCACATGTGGGCACGGGGCAGTGAAGGTGACTCCAGCTCA
 CAGTCTCGCCGATGCTGAGATGGGGGCCGACATGGCTTGAGCCCTTGAATGTCATTGCGGAGGATGGG
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 GCTGCCAAGCTGTGGAGTCGGGGGCCCTGGAGCTCAGTCCCTCCTTCCACCAGAAGAATGGCAGCAGT
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 GCAACAAAAGCTTTCTCCCTCCAGCTGGAATTGTCAAAGTGGACAAGGCAGCCTCTCACCTCCGGCAG
 CTGATGGATGAGCTCCAGCCCCAGGGAGCCCGGAGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG230585 representing NM_001167733
 Red=Cloning site Green=Tags(s)

MCIPPPNVTGSLHIGHALTVAIQDALVRWHRMRGDQVLWVPGSDHAGIATQAVVEKQLWKERGVRRHEL
 REAFLREVWQWEAKGGEICEQLRALGASLDWDRECFMTDVGSSVAVTEAFVRLYKAGLLYRNHQLVNWS
 CALRSAISDIEVENRPLPGHTQLRLPGCPTPVSFGLLFSVAFVVDGEPDAE VVVGTTRPETLPGDVAVAV
 HPDSDRYTHLHGRQLRHPLMGQPLPLITDYAVQPHVGTGAVKVTVAHSPADAEMGARHGLSPLNVAEDG
 TMTSLCGDWLQGLHRFVAREKIMSVLSEWGLFRGLQNHMPVLPICSRSGDVIEYLLKNQWFVRCQEMGAR
 AAKAVESGALELSPSFHQKNWQHWFSHIGDWCVSRQLWWGHQIPAYLVVEDHAQGEEDCVVVGSRSEAEAR
 EVAAELTGRPGAELTLERDPDVLDTWFSALFPFSALGWPQETPDLARFYPLSLETSGLLFWVGRMV
 MLGTQLTGQLPFSKVLHPMVRDRQGRKMSKSLGNVLDPRDIISGVEMQVLQEKLRSGNLDPAELIVAA
 AQKKDFPHGIPCEGTDALRFTLCSHGVSQAGDLHLSVSEVQSCRHFCKNIWNALRFILNALGEKFPQP
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 VLFSCADLGLRLLAPLMPFLAEELWQRLPPRPGCPPAPSVAPYPSACSLHWRQPELERRFSRVQEVV
 QVLRALRATYQLTKARPRVLLQSSEPGDQGLFEAFLEPLGTLGYCGAVGLLPPGAAAPSGWAQAPLSDTA
 QVYMEQLGLVDPQIQPLLLAARRYKLQKQLDSLARTPSEGEAGTQRQKQLSSLQLELSKDKAASHLRQ
 LMDEPPAPGSEPL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

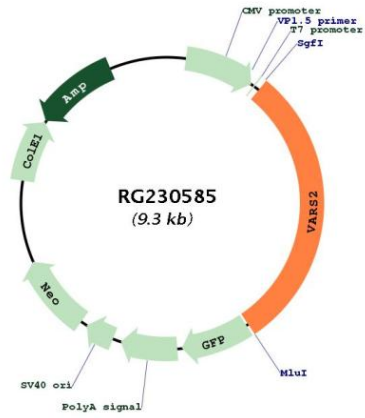
Cloning Scheme:



ACCN: NM_001167733

ORF Size:	2769 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:	<ol style="list-style-type: none">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_001167733.2 , NP_001161205.1
RefSeq Size:	3397 bp
RefSeq ORF:	2772 bp
Locus ID:	57176
UniProt ID:	Q5ST30
Cytogenetics:	6p21.33
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis
Gene Summary:	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]

Product images:



Circular map for RG230585