

Product datasheet for **RG238618**

VRK2 (NM_001288837) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VRK2 (NM_001288837) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	VRK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238618 representing NM_001288837.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCACCAAAAAGAAATGAAAAATACAACTTCCTATCCATTCCAGAAGCAAGTTCTGGATGAT
ATGGAAGGCAATCAGTGGTACTGGCAAGAAGATTGGCTCTGGAGGATTGGATTGATATATTTAGCT
TTCCCCACAAATAAACCCAGAGAAAAGATGCAAGACATGTAGTAAAAGTGGAAATATCAAGAAAATGGCCCG
TTATTTTCAGAACTTAAATTTTATCAGAGAGTTGCAAAAAAGACTGTATCAAAAAGTGGATAGAACGC
AAACAACCTGATTATTTAGGAATTCCTCTGTTTTATGGATCTGGTCTGACTGAATCAAGGGAAGAAGT
TACAGATTTATGGTAATGGAAAGACTAGGAATAGATTTACAGAAGATCTCAGGCCAGAATGGTACCTTT
AAAAAGTCAACTGTCCTGCAATTAGGTATCCGAATGTTGGATGTACTGGAATATACATGAAAATGAA
TATGTTTATGGTGTGAAAAGCAGCAATCTACTTTGGGTTACAAAAATCCAGACCAGGTTTATCTT
GCAGATTATGGACTTTCTACAGATATTGTCCCAATGGGAACCACAAACAGTATCAGGAAAATCCTAGA
AAAGGCCATAATGGGACAATAGAGTTTACCAGCTTGGATGCCACAAGGGAGTAGCCTTGTCCAGACGA
AGTGACGTTGAGATCCTCGGCTACTGCATGCTGCGGTGGTTGTGTGGGAAACTTCCTGGGAACAGAAC
CTGAAGGACCCTGTGGCTGTGCAGACTGCTAAAACAAATCTGTTGGACGAGCTCCCCCAGTCAGTGCTT
AAATGGGCTCCATCTGGAAGCAGTTGCTGTGAAATAGCCCAATTTTTGGTATGTGCTCATAGTTTAGCA
TATGATGAAAAGCCAACTATCAAGCCCTCAAGAAAATTTGAACCTCATGGAATACCTTTAGGACCA
CTGGACTTTTCCACAAAAGGACAGAGTATAAATGTCCATACTCCAACAGTCAAAAAGTTGATTCACAA
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AGCGCTGAGTCTGTGCAACATGGAAAGTGCAGAAAGAGGAGAACTGATTGGATTGATGAACAATGAA
GCAGCTCAGGAAAGCACAAGGAGAAGACAGAAAATATCAAGAGTCTCAAGAACCTTTGAATGAAGTAAAC
AGTTTTCCACAAAAAATCAGCTATACACAATCCCAAACCTATTTTATGAGCCTCATCAAGATTTTACC
AGTCCAGATATATTCAAGAAGTCAAGATCTCCATCTTGGTATAAATACACTTCCACAGTACGACGGGG
ATCACAGACTTAGAAAAGTTCAACTGGACTTTGGCCTACAATTTCCAGTTTACTCTTAGTGAAGAGACA
AACGCAGATGTTTATTATTCGCATCATACACTGCTCTTTTATGTTAGTATTTCTTCTTTATTT
TTTCTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

Protein Sequence:

>Peptide sequence encoded by RG238618
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MPPKRNEYKLPPIPFPEGKVLDDMEGNQWVLGKKIGSGGFGLIYLAFTNKPEKDARHVVKVEYQENGP
LFSELFYQRVAKKDCIKKWIQRKQLDYLGIPLFYGSLTEFKGRSYRFMVMERLGLDLQKISGQNGTF
KKSTVLQLGIRMLDVLEYIHENEYVHGDVKAANLLLGYKNPDQVYLADYGLSYRYCPNGNHKQYQENPR
KGHNGTIEFTSLDAHKGVALSRRSDVEILGYCMLRWLCKLPWEQNLKDPVAVQTAKTNLLDELQPSVL
KWAPSGSSCCEIAQFLVCAHSLAYDEKPNYQALKKILNPHGIPLGPLDFSTKGQSVNHTPNSQKVDSSQ
KAATKQVNKAHNRLIEKKVHSERSAESCATWKVQKEEKLIGLMNNEAAQESTRRRQKYQESQEPLEVN
SFPQKISYTFPNSFYEPHQDFTSPDIFKKSRSRSPSWYKYSTVSTGITDLESSTGLWPTISQFTLSEET
NADVYYRIIIPVLLMLVFLALFFL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites:

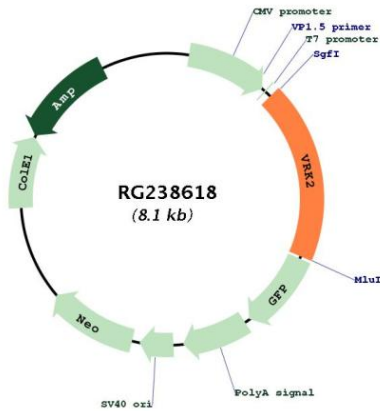
Sgfl-Mlul

Cloning Scheme:


- ACCN:** NM_001288837
- ORF Size:** 1524 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).
- RefSeq:** [NM_001288837.1](#), [NP_001275766.1](#)
- RefSeq Size:** 2499 bp
- RefSeq ORF:** 1527 bp
- Locus ID:** 7444
- UniProt ID:** [Q86Y07](#)
- Cytogenetics:** 2p16.1
- Protein Families:** Druggable Genome, Protein Kinase, Transmembrane
- MW:** 58.1 kDa

Gene Summary:

This gene encodes a member of the vaccinia-related kinase (VRK) family of serine/threonine protein kinases. The encoded protein acts as an effector of signaling pathways that regulate apoptosis and tumor cell growth. Variants in this gene have been associated with schizophrenia. Alternative splicing results in multiple transcript variants that differ in their subcellular localization and biological activity. [provided by RefSeq, Jan 2014]

Product images:


Circular map for RG238618