

## Product datasheet for **RC225615**

### VRK2 (NM\_001130483) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VRK2 (NM_001130483) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VRK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225615 representing NM_001130483 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCACCAAAAAGAAATGAAAAATACAACTTCTATTCCATTTCCAGAAGGCAAGTTCTGGATGATA  
TGGAAGGCAATCAGTGGTACTGGGCAAGAAGATTGGCTCTGGAGGATTTGGATTGATATATTTAGCTTT  
CCCCACAAATAAACCAGAGAAAGATGCAAGACATGTAGTAAAAGTGAATATCAAGAAAAATGGCCCGTTA  
TTTTCAGAACTTAAATTTTATCAGAGAGTTGCAAAAAAGACTGTATCAAAAAGTGGATAGAACGCAAC  
AAGTTGATTATTTAGGAATTCCTCTGTTTTATGGATCTGGTCTGACTGAATTCAGGGAAGAAGTTACAG  
ATTTATGGTAATGGAAAGACTAGGAATAGATTTACAGAAGATCTCAGGCCAGAATGGTACCTTTAAAAAG  
TCAACTGTCCTGCAATTAGGTATCCGAATGTTGGATGACTGGAATATATACATGAAAATGAATATGTTT  
ATGGTGATATAAAGCAGCAAACTACTTTTGGTTACAAAAATCCAGACCAGGTTTATCTTGCAGATTA  
TGGACTTTCTACAGATATTGTCCCAATGGGAACCACAAACAGTATCAGGAAAACTCAGAAAAGGCCAT  
AATGGGACAATAGAGTTTACCAGCTTGGATGCCCAAGGGAGTAGCCTTGTCAGACGAAGTGACGTTG  
AGATCCTCGGCTACTGCATGCTGCGGTGGTTGTGTGGGAACTTCCCTGGGAACAGAACCTGAAGGACCC  
TGTGGCTGTGCAGACTGCTAAAACAACTCTGTTGGACGAGCTCCCCAGTCAGTGCTTAAATGGGCTCCT  
TCTGGAAGCAGTTGCTGTGAAATAGCCCAATTTTGGTATGTGCTCATAGTTTAGCATATGATGAAAAGC  
CAAATATCAAGCCCTCAAGAAAATTTGAACCTCATGGAATACCTTTAGGACCACTGGACTTTTCCAC  
AAAAGGACAGAGTATAAATGTCCATACTCCAAACAGTCAAAAAGTTGATTCACAAAAGGCTGCAACAAAAG  
CAAGTCAACAAGGCACACAATAGGTTAATCGAAAAAAGTCCACAGTGAGAGAAGCGCTGAGTCTGTG  
CAACATGGAAAGTGCAGAAAGAGGAGAACTGATTGGATTGATGAACAATGAAGCAGCTCAGTTTAGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC225615 representing NM\_001130483  
Red=Cloning site Green=Tags(s)

MPPKRNEKYKLPFPFPEGKVLDDMEGNQWVLGKKIGSGGFGLIYLAFPTNKPEKDARHVVKVEYQENGL  
 FSELKFYQRVAKKDCIKKWIERNQLDYLGIPLFYGSGLTEFKGRSYRFMVMERLIDLQKISGQNGTFKK  
 STVLQLGIRMLDVLEYIHENEYVHGDIIKANLLLGYNPDQVYLADYGLSYRYCPNGNHKQYQENPRKGH  
 NGTIEFTSLDAHKGVALSRRSDVEILGYCMLRWLGGKLPWEQNLKDPVAVQTAKTNLLDEL PQSVLKWAP  
 SGSSCCEIAQFLVCAHSLAYDEKPNYQALKKILNPHGIPLGPLDFSTKGQSINVHTPNSQKVDSQKAATK  
 QVNAKHNRLIEKKVHSERSAESCATWKVQKKEKLIGLMNNEAAQFR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8057\\_a12.zip](https://cdn.origene.com/chromatograms/mk8057_a12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001130483

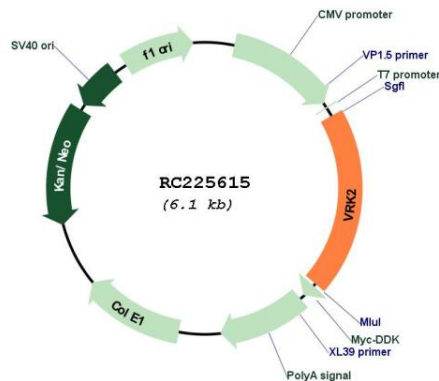
**ORF Size:** 1188 bp

**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](mailto: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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_001130483.2</u> , <u>NP_001123955.1</u>
<b>RefSeq ORF:</b>	1191 bp
<b>Locus ID:</b>	7444
<b>UniProt ID:</b>	<u>Q86Y07</u>
<b>Cytogenetics:</b>	2p16.1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>MW:</b>	44.9 kDa
<b>Gene Summary:</b>	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 RC225615