

Product datasheet for RC237955

VRK2 (NM_001288838) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VRK2 (NM_001288838) 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:	>RC237955 representing NM_001288838 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCACCAAAAAGAAATGAAAAATACAACTTCTATTCCATTTCCAGAAGGCAAGGTTCTGGATGATA
TGGAAAGCAATCAGTGGTACTGGGCAAGAAGATTGGCTCTGGAGGATTTGGATTGATATATTTAGCTTT
CCCCACAAATAAACCAGAGAAAGATGCAAGACATGTAGTAAAAGTGAATATCAAGAAAAATGGCCCGTTA
TTTTCAGAACTTAAATTTTATCAGAGAGTTGCAAAAAAGACTGTATCAAAAAGTGGATAGAACGCAAC
AAGTTGATTATTTAGGAATTCCTCTGTTTTATGGATCTGGTCTGACTGAATTCAGGGAAGAAGTTACAG
ATTTATGGTAATGGAAAGACTAGGAATAGATTTACAGAAGATCTCAGGCCAGAATGGTACCTTTAAAAAG
TCAACTGTCCTGCAATTAGGTATCCGAATGTTGGATGACTGGAATATATACATGAAAATGAATATGTTT
ATGGTGATATAAAGCAGCAAACTACTTTTGGGTTACAAAAATCCAGACCAGGTTTATCTTGCAGATTA
TGGACTTTCTACAGATATTGTCCCAATGGGAACCACAAACAGTATCAGGAAAACTCAGAAAAGGCCAT
AATGGGACAATAGAGTTTACCAGCTTGGATGCCCAAGGGAGTAGCCTTGTCCAGACGAAGTGACGTTG
AGATCCTCGGCTACTGCATGCTGCGGTGGTTGTGGGAACTCCCTGGGAACAGAACCTGAAGGACCC
TGTGGCTGTGCAGACTGCTAAAACAACTCTGTTGGACGAGCTCCCCAGTCAGTGCTTAAATGGGCTCCT
TCTGGAAGCAGTTGCTGTGAAATAGCCCAATTTTGGTATGTGCTCATAGTTTAGCATATGATGAAAAGC
CAAATATCAAGCCCTCAAGAAAATTTGAACCTCATGGAATACCTTTAGGACCACTGGACTTTTCCAC
AAAAGGACAGAGTATAAATGTCCATACTCCAAACAGTCAAAAAGTTGATTCACAAAAGGCTGCAACAAAG
CAAGTCAACAAGGCACACAATAGGTTAATCGAAAAAAGTCCACAGTGAGAGAAGCGCTGAGTCCTGTG
CAACATGGAAAGTGCAAAAGAGGAGAACTGATTGGATTGATGAACAATGAAGCAGCTCAGTTTAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC237955 representing NM_001288838
Red=Cloning site Green=Tags(s)

MPPKRNEKYKLPFPPEGKVLDDMEGNQWVLGKIGSGGFGLIYLAFPTNKPEKDARHVVKVEYQENGL
 FSELKFYQRVAKKDCIKKWIERNQLDYLGIPLFYGSLTEFKGRSYRFMVMERLGIDLQKISGQNGTFKK
 STVLQLGIRMLDVLEYIHENEYVHGDIKAAANLLGYKNPDQVYLADYGLSYRYCPNGNHKQYQENPRKGG
 NGTIEFTSLDAHKGVALSRRSDVEILGYCMLRWLGGKLPWEQNLKDPVAVQTAKTNLLDEL PQSVLKWAP
 SGSSCCEIAQFLVCAHSLAYDEKPNYQALKKILNPHGIPLGPLDFSTKGQSINVHTPNSQKVDSQKAATK
 QVNAHNRLIEKKVHSERSAESCATWKVQKKEKLIGLMNNEAAQFR

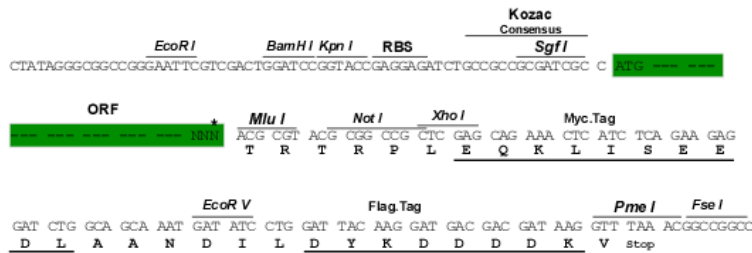
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8057_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001288838

ORF Size: 1188 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:

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_001288838.1](#), [NP_001275767.1](#)

RefSeq Size: 2430 bp

RefSeq ORF: 1191 bp

Locus ID: 7444

UniProt ID: [Q86Y07](#)

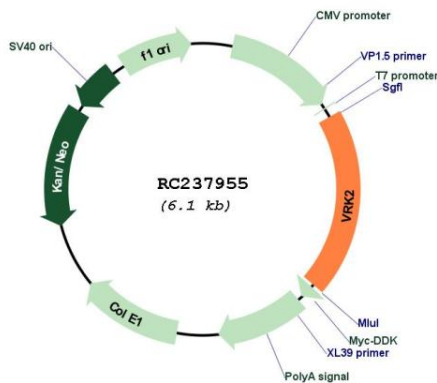
Cytogenetics: 2p16.1

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

MW: 45 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 RC237955