

Product datasheet for **SC325877**

VRK2 (NM_001130483) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VRK2 (NM_001130483) Human Untagged Clone
Tag:	Tag Free
Symbol:	VRK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325877 representing NM_001130483. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**
 ATGCCACCAAAAGAAATGAAAAATACAACTTCTATTCCATTCCAGAAGGCAAGGTTCTGGATGAT
 ATGGAAGGCAATCAGTGGGTACTGGGCAAGAAGATTGGCTCTGGAGGATTGGATTGATATATTTAGCT
 TTCCCCACAAATAAACAGAGAAAGATGCAAGACATGTAGTAAAGTGGAATATCAAGAAATGGCCCG
 TTATTTTCAGAACTTAAATTTTATCAGAGAGTTGCAAAAAAGACTGTATCAAAAAGTGGATAGAACGC
 AAACAACCTTGATTATTTAGGAATTCCTCTGTTTTATGGATCTGGTCTGACTGAATCAAGGAAGAAGT
 TACAGATTTATGGTAATGGAAAGACTAGGAATAGATTTACAGAAGATCTCAGGCCAGAATGGTACCTTT
 AAAAAGTCAACTGTCTGCAATTAGGTATCCGAATGTTGGATGTACTGGAATATATACATGAAAATGAA
 TATGTTTCATGGTGATATAAAAGCAGCAAACTCTACTTTTGGGTTACAAAAATCCAGACCAGGTTTATCTT
 GCAGATTATGGACTTTCTACAGATATTGTCCCAATGGGAACCAAAACAGTATCAGGAAAATCCTAGA
 AAAGGCCATAATGGGACAATAGAGTTTACCAGCTTGGATGCCCAAGGGAGTAGCCTTGTCCAGACGA
 AGTGACGTTGAGATCCTCGGCTACTGCATGCTGCGGTGGTTGTGTGGAACTTCCCTGGGAACAGAAC
 CTGAAGGACCCTGTGGCTGTGCAGACTGCTAAAACAAATCTGTTGGACGAGCTCCCCAGTCAGTGCTT
 AAATGGGCTCCTTCTGGAAGCAGTTGCTGTGAAATAGCCCAATTTTGGTATGTGCTCATAGTTTAGCA
 TATGATGAAAAGCCAACTATCAAGCCCTCAAGAAAATTTGAACCTCATGGAATACCTTTAGGACCA
 CTGGACTTTTCCAAAAAGGACAGAGTATAAATGTCCATACTCCAAACAGTCAAAAAGTTGATTCACAA
 AAGGCTGCAACAAAGCAAGTCAACAAGGCACACATAGGTTAATCGAAAAAAGTCCACAGTGAGAGA
 AGCGCTGAGTCTGTGCAACATGGAAAGTCAGAAAGAGGAGAACTGATTGGATTGATGAACAATGAA
 GCAGCTCAGTTTAGG**AG**
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_001130483



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Insert Size:	1191 bp
OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001130483.2
RefSeq Size:	1988 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]

Transcript Variant: This variant (5) differs in the 5' UTR and contains an alternate exon in the 3' coding region, which results in a frameshift, compared to variant 1. The encoded isoform (3) has a shorter and distinct C-terminus, compared to isoform 1. Variants 5 and 9 encode the same isoform (3, also known as VRK2B).