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Product datasheet for RC224292

VRK3 (NM_016440) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VRK3 (NM_016440) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VRK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC224292 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATCTCCTTCTGTCCAGACTGTGGCAAAAGTATCCAAGCGGCATTCAAATTCTGCCCCTACTGTGGAA
ATTCTTTGCCTGTAGAGGAGCATGTAGGGTCCCAGACCTTTGTCAATCCACATGTGTCATCCTTCCAAGG
CTCAAAGAGAGGGCTGAACTCCAGTTTTGAAACCTCTCCTAAGAAAGTGAAATGGTCCAGCACCGTCACC
TCTCCCCGATTATCCCTCTTCTCAGATGGTGACAGTTCTGAGTCTGAAGATACTCTGAGTTCCTCTGAGA
GATCCAAAGGCTCCGGGAGCAGACCCCCAACCCCCAAAAGCAGCCCTCAGAAGACCAGGAAGAGCCCTCA
GGTGACCAGGGGTAGCCCTCAGAAGACCAGCTGTAGCCCTCAGAAGACCAGGCAGAGCCCTCAGACGCTG
AAGCGGAGCCGAGTGACCACCTCACTTGAAGCTTTGCCCACAGGGACAGTGCTGACAGACAAGAGTGGGC
GACAGTGGAAGCTGAAGTCCTTCCAGACCAGGGACAACCAGGGCATTCTCTATGAAGCTGCACCCACCTC
CACCCTCACCTGTGACTCAGGACCACAGAAGCAAAAGTTCTCACTCAAACTGGATGCCAAGGATGGGCGC
TTGTTCAATGAGCAGAACTTCTTCCAGCGGGCCGCCAAGCCTCTGCAAGTCAACAAGTGGAAGAAGCTGT
ACTCGACCCCACTGCTGGCCATCCCTACCTGCATGGGTTTCGGTGTTCACCAGGACAAATACAGGTTCTT
GGTGTTACCCAGCCTGGGGAGGAGCCTTCAGTCGGCCCTGGATGTCAGCCCAAAGCATGTGCTGTCAGAG
AGGTCTGTGCTGCAGGTGGCCTGCCGGCTGCTGGATGCCCTGGAGTTCCTCCATGAGAATGAGTATGTTC
ATGGAAATGTGACAGCTGAAAATATCTTTGTGGATCCAGAGGACCAGAGTCAGGTGACTTTGGCAGGCTA
TGGCTTCGCCTTCCGCTATTGCCCAAGTGGCAAACACGTGGCCTACGTGGAAGGCAGCAGGAGCCCTCAC
GAGGGGGACCTTGAGTTCATTAGCATGGACCTGCACAAGGGATGCGGGCCCTCCCGCCGCAGCGACCTCC
AGAGCCTGGGCTACTGCATGCTGAAGTGGCTCTACGGGTTTCTGCCATGGACAAATTGCCTTCCCAACAC
TGAGGACATCATGAAGCAAAAACAGAAGTTTGTTGATAAGCCGGGGCCCTTCGTGGGACCCTGCGGTCAC
TGGATCAGGCCCTCAGAGACCCTGCAGAAGTACCTGAAGGTGGTGATGGCCCTCACGTATGAGGAGAAGC
CGCCCTACGCCATGCTGAGGAACAACCTAGAAGCTTTGCTGCAGGATCTGCGTGTGTCTCCATATGACCC
CATTGGCCTCCCGATGGTGCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224292 protein sequence
Red=Cloning site Green=Tags(s)

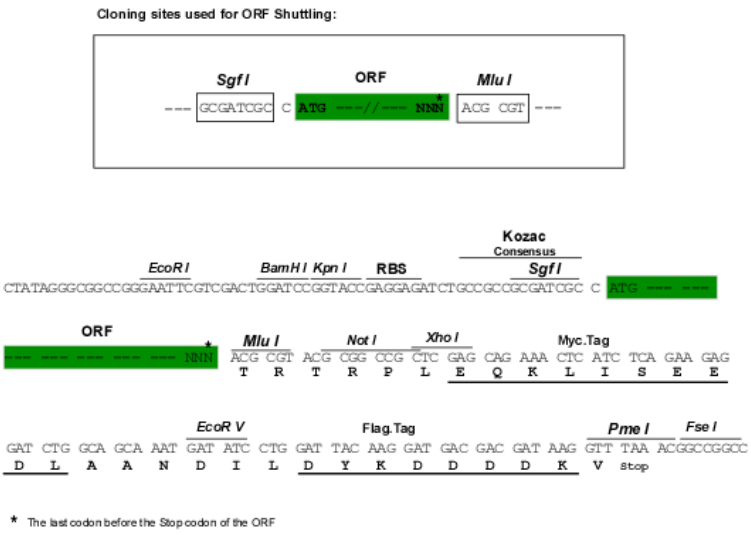
MISFCPDCGKSIQAAFKFCPYCGNSLPVEEHVGSQTFVNPHVSSFQGSKRGLNSSFETSPKKVKWSSTVT
SPRLSLFSDGDSSESEDTLSSSERSKGSGSRPPTPKSSPQKTRKSPQVTRGSPQKTSCSPQKTRQSPQTL
KRSRVTTSLEALPTGTVLTDKSGRQWKLKSFQTRDNQGILYEAAPTSTLTCDSGPQKQKFSLKLDAKDGR
LFNEQNFFQRAAKPLQVNKWKKLYSTPLLAIPTCMGFGVHQDKYRFLVLPSLGRSLQSALDVSPKHVLSE
RSVLQVACRLLDALEFLHENEYVHGNVTAENIFVDPEDQSQVTLAGYGFAFRYCPSGKHVAYVEGSRSPH
EGDLEFISMDLHKGCGPSRRSDLQSLGYCMLKWLYGFLPWTNCLPNTEDIMKQKQKFVDKPGPFVGPCGH
WIRPSETLQKYLKVVMALTYEEKPPYAMLRNNLEALLQDLRVSPYDPIGLPMVP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6454_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016440

ORF Size: 1422 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_016440.4

RefSeq Size: 2129 bp

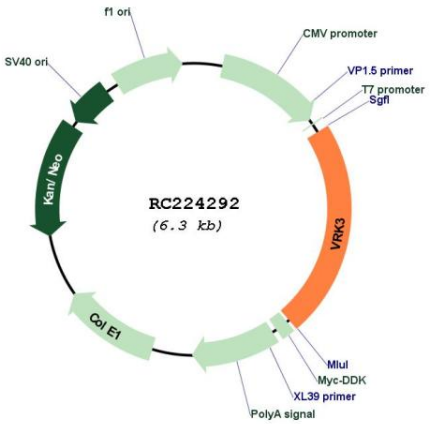
RefSeq ORF: 1425 bp

Locus ID: 51231

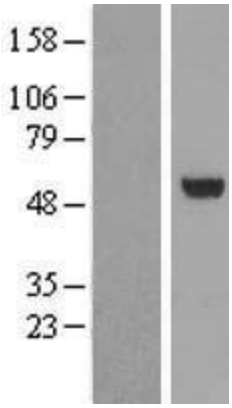
UniProt ID: Q8IV63

Cytogenetics:	19q13.33
Domains:	S_TKc
Protein Families:	Druggable Genome, Protein Kinase
MW:	52.9 kDa
Gene Summary:	This gene encodes a member of the vaccinia-related kinase (VRK) family of serine/threonine protein kinases. In both human and mouse, this gene has substitutions at several residues within the ATP binding motifs that in other kinases have been shown to be required for catalysis. In vitro assays indicate the protein lacks phosphorylation activity. The protein, however, likely retains its substrate binding capability. This gene is widely expressed in human tissues and its protein localizes to the nucleus. Alternative splicing results in multiple transcripts encoding different isoforms. [provided by RefSeq, Jul 2008]

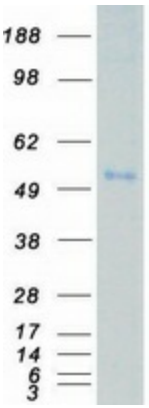
Product images:



Circular map for RC224292



Western blot validation of overexpression lysate (Cat# [LY414023]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224292 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified VRK3 protein (Cat# [TP324292]). The protein was produced from HEK293T cells transfected with VRK3 cDNA clone (Cat# RC224292) using MegaTran 2.0 (Cat# [TT210002]).