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Product datasheet for MR224531

Vrk1 (NM_001029843) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vrk1 (NM_001029843) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Vrk1
Synonyms:	51PK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR224531 representing NM_001029843
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCCGTGTAAAAGCAGCTCAGGCTGGAAGACCCGGACCTGCGAAGAGGCGCCTCGCAGAGCAGTTTG
CCGCTGGAGAGGTCCTAACCGACATGTCTAGGAAGGAGTGGAAACTAGGATTGCCCATTGGCCAAGGTGG
CTTTGGCTGCATCTATCTGGCGGACACAAATTCTTCCAAACCGGTTGGCAGTGACGCGCCCTGTGTTGTG
AAAGTGGAACCCAGTGACAATGGACCTCTTTTCACGGAATTAAAGTTCTACCAGAGGGCTGCTAAACCAG
AGCAAATTCAGAAATGGATTCGTACACATAAATTGAAGTACCTTGGTGTTCCTAAGTATTGGGGATCTGG
TCTACATGATAAAAATGGAAAAAGTTACAGGTTTATGATAATGGACCGCTTTGGGAGTGACCTTCAGAAA
ATATATGAAGCAAATGCCAAAAGGTTTTCTCGGAAAACTGTATTGCAGCTAAGCTTAAGAATTCTGGATA
TCCTGGAGTACATCCATGAGCATGAGTACGTGCACGGGGACATCAAGGCCTCCAACCTGCTCCTGAGTCA
CAAGAACCCTGACCAGGTATATTTGGTAGACTATGGCCTTGCTTATCGGTACTGCCCAGATGGAGTTCAT
AAAGAGTACAAGGAAGATCCCAAAAGGTGCCATGACGGCACCCTGGAGTTCACCAGCATCGACGCTCACA
AAGGCGTGGCCCCATCAAGACGTGGTGATTTGGAAATACTTGGTTATTGCATGATCCAGTGGCTCAGCGG
CTGTCTTCCTTGGGAAGATAACTTGAAAGATCCTAACTACGTTAGGGATTCCAAAATTAGATACAGAGAC
AACGTCGCAGCTTTGATGGAGAAATGCTTTCCTGAGAAAAATAAGCCAGGTGAGATCGCTAAGTACATGG
AGTCTGTGAAACTACTGGAATACACCGAAAAACCTCTCTATCAAAACCTACGTGATATCCTTTTACAAGG
ACTAAAAGCTATAGGAAGTAAAGACGACGGCAAACTGGATTTTAGTGCTGTGGAGAACGGAAGTGTGAAG
ACAAGACCAGCCTCAAAGAAGCGGAAGAAAGAAGCAGAAGAAAGCGCGGTGTGCGCTGTGGAGGACATGG
AGTGCTCAGACACACAGGTGCAAGAGGCCGCACAGACCCGTTCCAGGAGGCAGCAGCATTTGGGATTGGA
ACAAGACATGCTAAGGCTAGACCGTAGGGGTTCACGAACCAGAAAGAAAGCCCAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

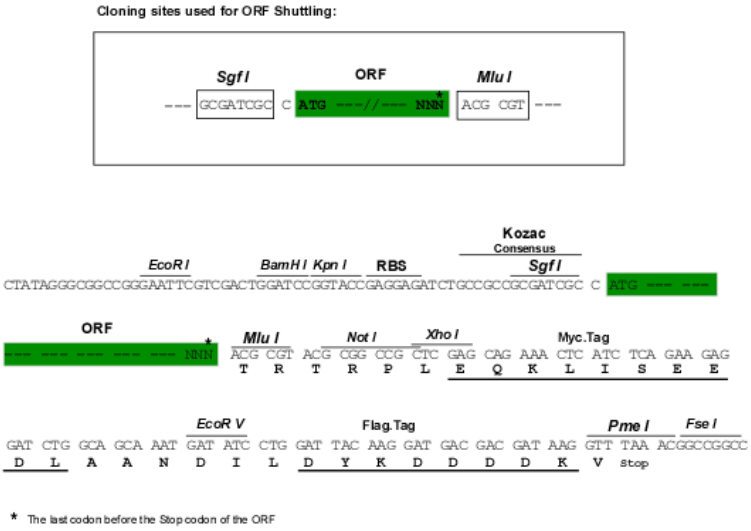
>MR224531 representing NM_001029843
Red=Cloning site Green=Tags(s)

MPRVKAAQAGRPGPAKRRLAEQFAAGEVLTDMSRKEWKLGLPIGQGGFGCIYLADTNSSKPVGSDAPCVV
KVEPSDNGPLFTELKFYQRAAKPEQIQKWIRTHKLKYLGVPKYWGSGLHDKNGKSYRFMIMDRFGSDLQK
IYEANAKRFSRKTVLQLSLRILDILEYIHEHEYVHGDIKASNLLLSHKNPDQVYLVDYGLAYRYCPDGVH
KEYKEDPKRCHDGTLEFTSIDAHKGVAPSRRGDLEILGYCMIQWLSGCLPWEDNLKDPNYVRDSKIRYRD
NVAALMEKCFPEKNKPGEIAKYMESVKLLEYTEKPLYQNLRDILLQGLKAIGSKDDGKLDFSAVENGSVK
TRPASKKRKKEAEESAVCAVEDMECSDTQVQEAAQTRSRRQQHLGLEQDMLRLDRRGSRTRKKAQK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001029843

ORF Size: 1248 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_001029843.2

RefSeq Size: 3724 bp

RefSeq ORF: 1251 bp

Locus ID: 22367

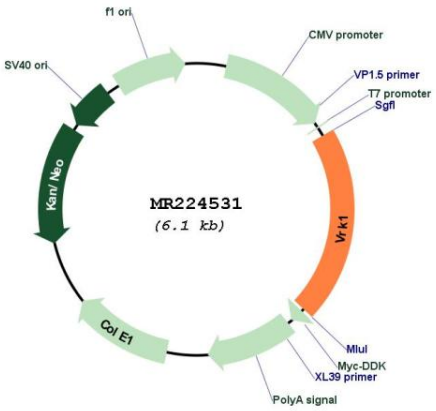
UniProt ID: Q80X41

Cytogenetics: 12 E- F1

MW: 47.9 kDa

Gene Summary: Serine/threonine kinase involved in Golgi disassembly during the cell cycle: following phosphorylation by PLK3 during mitosis, required to induce Golgi fragmentation. Acts by mediating phosphorylation of downstream target protein. Phosphorylates 'Thr-18' of p53/TP53 and may thereby prevent the interaction between p53/TP53 and MDM2. Phosphorylates casein and histone H3. Phosphorylates BANF1: disrupts its ability to bind DNA, reduces its binding to LEM domain-containing proteins and causes its relocalization from the nucleus to the cytoplasm. Phosphorylates ATF2 which activates its transcriptional activity (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224531