

Product datasheet for **RC204460**

FRK (NM_002031) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FRK (NM_002031) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FRK
Synonyms:	GTK; PTK5; RAK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204460 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCAACATCTGTCAGAGGCTCTGGGAGTACCTAGAACCCTATCTCCCCTGTTTGTCCACGGAGGCAG
 ACAAGTCAACCGTGATTGAAAATCCAGGGGCCCTTTGCTCTCCCAGTCACAGAGGCATGGCCACTACTT
 TGTGGCTTTGTTTATTACCAGGCTCGGACTGCTGAGGACTTGAGCTTCCGAGCAGGTGACAAAATTCAA
 GTTCTGGACACTTTGCATGAGGGCTGGTGGTTTCCAGACACTTGGAGAAAAGACGAGATGGCTCCAGTC
 AGCAACTACAAGGCTATATTCCTTCTAACTACGTGGCTGAGGACAGAAGCCTACAGGCAGAGCCGTGGTT
 CTTTGGAGCAATCGAAGATCAGATGCAGAGAAAACAATTATATTAGAAAACAAGACCGGTTCTCTTT
 CTAATCAGAGAAAGTAAAGCCAAAAGGAGAATTCTCTCTTTTCAGTTTTAGATGGAGCAGTTGTAAAAC
 ACTACAGAATTAAGACTGGATGAAGGGGGATTTTTTCTCACGCGAAGAAGAATCTTTTCAACTGAA
 CGAATTTGTGAGCCACTACACCAAGACAAGTGACGGCCTGTGTCAAGCTGGGAAACCATGCTTAAAG
 ATCCAGGTCCCAGCTCCATTTGATTTGTCGTATAAAACCGTGGACCAATGGGAGATAGACCGCAACTCCA
 TACAGTTCTGAAGCGATTGGGATCTGGTCAGTTTGGCGAAGTATGGGAAGTCTGTGGAACAATACCAC
 TCCAGTAGCAGTAAAACATTAACCAGGTTCAATGGATCCAAATGACTTCTGAGGGAGGCACAGATA
 ATGAAGAACCTAAGACATCCAAAGCTTATCCAGCTTTATGCTGTTTGCACTTTAGAAGATCCAAATTTATA
 TTATTACAGAGTTGATGAGACATGGAAGTCTGCAAGAATATCTCCAAAATGACTGAGTCAAAAATCCA
 TCTGACTCAACAGGTAGACATGGCGGCACAGGTTGCCTCTGGAATGGCCTATCTGGAGTCTCGGAACTAC
 ATTCACAGAGATCTGGCTGCCAGAAATGCCTCGTTGGTGAACATAATATCTACAAAGTAGCAGATTTTG
 GACTTGCAGAGTTTTTAAGGTAGATAATGAAGACATCTATGAATCTAGACACGAAATAAAGCTGCCGGT
 GAAGTGGACTGCCCCGAAGCCATTCGTAGTAATAAATTCAGCATTAAGTCCGATGTATGGTCATTTGGA
 ATCCTTCTTTATGAAATCATTACTTATGGCAAAATGCCTTACAGTGGTATGACAGGTGCCAGGTAATCC
 AGATGTTGGCTCAAACTATAGACTTCCGCAACCATCCAAGTGTCCACAGCAATTTTACAACATCATGTT
 GGAGTGTGGAATGCAGAGCCTAAGGAACGACCTACATTTGAGACACTGCGTTGGAAACTTGAAACTAT
 TTTGAAACAGACTCTTCATATTCAGATGCAAAATAACTTCATAAGA

ACCGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204460 protein sequence
 Red=Cloning site Green=Tags(s)

MSNICQRLWEYLEPYLPCLSTEADKSTVIENPGALCSPQSQRHGHYFVALFDYQARTAEDLSFRAGDKLQ
 VLDTLHEGWFFARHLEKRRDSSQQLQGYIPSNVVAEDRSLQAEPWFFGAIGRSDAEKQLLYSENKTGSF
 LIRESSESQKGEFSLSVLDGAVVKHYRIKRLDEGGFFLTRRRIFSTLNEFVSHYTKSDGLCVKLGKPKLK
 IQVPAPFDLSYKTVDQWEIDRNSIQLLKRLLGSGQFGEVWEGLWNNTPVAVKTLKPGSMDPNDPFLREAQI
 MKNLRHPKLIQLYAVCTLEDPIYIITELMRHGSLEQYLNQDTSKIHLLTQQVDMAAQVASGMAYLESRNY
 IHRDLAARNVLVGEHNIYKVADFGLARVFKVDNEDIYESRHEIKLPVKWTAPEAIRSNKFSIKSDVWSFG
 ILLYEIITYGKMPYSGMTGAQVIQMLAQNYRLPQPSNCPQQFYNIMLECWNAEPKERPTFETLRWKLEDY
 FETDSSYSYDANNFIR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6139_e08.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_002031

ORF Size: 1515 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_002031.3](#)

RefSeq Size: 2864 bp

RefSeq ORF: 1518 bp

Locus ID: 2444

UniProt ID: [P42685](#)

Cytogenetics: 6q22.1

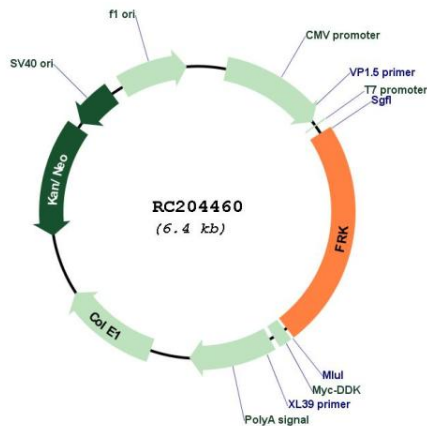
Domains: pkinase, SH2, TyrKc, SH3, S_TKc

Protein Families: Druggable Genome, Protein Kinase

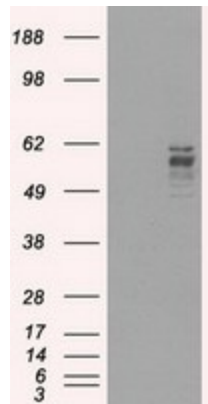
MW: 58.3 kDa

Gene Summary: The protein encoded by this gene belongs to the TYR family of protein kinases. This tyrosine kinase is a nuclear protein and may function during G1 and S phase of the cell cycle and suppress growth. [provided by RefSeq, Jul 2008]

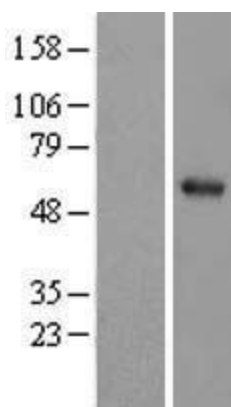
Product images:



Circular map for RC204460



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FRK (Cat# RC204460, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FRK (Cat# [TA500526]). Positive lysates [LY400740] (100ug) and [LC400740] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400740]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204460 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).