

Product datasheet for **RC207438**

PAK6 (NM_020168) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAK6 (NM_020168) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAK6
Synonyms:	PAK5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC207438 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTCCGCAAGAAAAAGAAGAAACGCCCTGAGATCTCAGCGCCACAGAAGCTCCAGCACCGTGTCCACA
 CCTCCTTCGACCCCAAAGAAGGCAAGTTTGTGGGCCTCCCCACAATGGCAGAACATCCTGGACACACT
 GCGGGCGCCCAAGCCCGTGGTGGACCTTCGCGAATCACACGGGTGCAGCTCCAGCCCATGAAGACAGTG
 GTGCGGGGCAGCGCATGCCTGTGGATGGCTACATCTCGGGGCTGCTCAACGACATCCAGAAGTTGTGAG
 TCATCAGCTCCAACACCTGCGTGGCCGACGCCACCAGCCGGCGGGGCACAGTCCCTGGGGCTGCT
 GGGGGATGAGCACTGGGCCACCGACCCAGACATGTACCTCCAGAGCCCCAGTCTGAGCGCACTGACCCC
 CACGGCCTCTACCTCAGTGAACGGGGCACACCAGCAGGCCACAAGCAGATGCCGTGGCCGAGCCAC
 AGAGCCACGGGTCTGCCAATGGGCTGGCTGCAAAGGCACAGTCCCTGGGCCCGCCGAGTTTCAGGG
 TGCTCGCAGCGTGTCTGCAGTGGGTGCTGCCTGCAGAGCTCCCCACCAGGAGCTCGCCCCCAGC
 GGCACCAATAGGCATGGAATGAAGGCTGCCAAGCATGGCTCTGAGGAGGCCCGGCCACAGTCTGCCTGG
 TGGGCTCAGCCACAGGCAGGCCAGGTGGGGAAGGCAGCCCTAGCCCTAAGACCCGGGAGAGCAGCCTGAA
 GCGCAGGCTATTCGAAGCATGTTCTGTCCACTGCTGCCACAGCCCCTCCAAGCAGCAGCAAGCCAGGC
 CCTCCACCACAGAGCAAGCCCAACTCCTCTTCCGACCGCCGAGAAAGACAACCCCAAGCCTGGTGG
 CCAAGGCCAGTCTTGCCTCGGACCAGCCGGTGGGGACCTTCAGCCCTCTGACCACTTCGGATACCAG
 CAGCCCCCAGAAGTCCCTCCGCACAGCCCCGGCCACAGGCCAGCTTCCAGGCCGTTTCCCCAGCGGGA
 TCCCCCGCACCTGGCAGGCCAGATCAGCACCAGCAACCTGTACCTGCCCCAGGACCCACGGTTGCCA
 AGGGTCCCTGGTGGTGGGACACAGGTGTTGTGACACATGAGCAGTTCAAGGCTGCGATGGATGGT
 GGTGGACCAGGGTGACCCCGGCTGCTGTGGACAGTACGTGAAGATTGGCGAGGGCTCCACCGGCATC
 GTCTGTTGGCCCGGAGAAGCACTCGGGCCGCCAGGTGGCCGTCAAGATGATGGACCTCAGGAAGCAGC
 AGCGCAGGGAGCTGCTCTCAACGAGGTGGTGTATGCGGGACTACCAGCACTTCAACGTGGTGGAGAT
 GTACAAGAGCTACCTGGTGGGCGAGGAGCTGTGGGTGCTCATGGAGTTCTGCAGGGAGGAGCCCTACA
 GACATCGTCTCCAAGTCAGGCTGAATGAGGAGCAGATTGCCACTGTGTGTGAGGCTGTGCTGCAGGCC
 TGGCCTACCTGCATGCTCAGGGTGTATCCACCGGACATCAAGAGTGACTCCATCCTGCTGACCCTCGA
 TGGCAGGGTGAAGCTCTCGGACTTCGGATTCTGTGCTCAGATCAGCAAAGACGTCCCTAAGAGGAAGTCC
 CTGGTGGGAACCCCTACTGGATGGCTCCTGAAGTGATCTCCAGGTCTTTGTATGCCACTGAGGTGGATA
 TCTGGTCTCTGGGCATCATGGTATTGAGATGGTATGAGGGAGCCACCGTACTTCAAGTACTCCCCAGT
 GCAAGCCATGAAGAGGCTCCGGGACAGCCCCCACCAGCTGAAAACTCTCACAAGGTCTCCCCAGTG
 CTGCGAGACTTCTGGAGCGGATGCTGGTGCAGGGACCCCAAGAGAGAGCCACAGCCAGGAGCTCCTAG
 ACCACCCCTTCTGTGCAGACAGGGCTACCTGAGTGCCTGGTGGCCCTGATCCAGCTCTACCGAAAGCA
 GACCTCCACCTGC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207438 protein sequence
Red=Cloning site Green=Tags(s)

MFRKKKKRPEISAPQNFQHRVHTSFDPKEGKFVGLPPQWQNI~~LDL~~RRPKPVVDP~~SRITRVQLQPMKTV~~
VRSAMPVDGYISGLLNDIQKLSVISSNTLRGRSPT~~SRRAQSLG~~LLGDEHWATDPD~~MYLQSPQSERTDP~~
HGLYLSCNGGTPAGHKQMPWPEPQSPRVL~~PNGLA~~AKA~~QSLGPAEFQ~~GASQ~~RCLQLGAC~~LQSSPPGASPT
GTNRHGMKAAKHGSEEARPQ~~SCLVGSATGR~~PGGEGSP~~PKTRESSLKRRLFRSMFL~~STAATAPPSSSKPG
PPPQSKPNSSFRPPQKDNPPSLVAKA~~QSLPSDQ~~PVGTFSPLTSDTSSPQKSLRTAPATG~~QLPGRSSPAG~~
SPRTWHAQISTSNLYLPQDPTVAKGALAGEDTGVVTHEQFKAALRMVVDQ~~GPRL~~LLDSYKIGEGSTGI
VCLAREKHSGRQVAVK~~MDLRKQQRRELLF~~NEVIMRDYQHFN~~VEMYKSYL~~VGEELWVLM~~EFLQGGALT~~
DIVSQVRLNEEQIATVCEAVLQALAYLHAQ~~GVHRDIKSDS~~ILLTLDGRV~~KLSDFGFCAQISKDVPKRKS~~
LVGTPY~~WMAPEVISRSLYATEVDI~~WSL~~GIMVIEMVDG~~EPYPFSDSPVQAMKRL~~RDSPPP~~KLKNSHKVSPV
LRDFLERMLVRDPQERATAQELLDHPFLLQTGLPECLVPLIQLYR~~KQTSTC~~

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6140_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020168

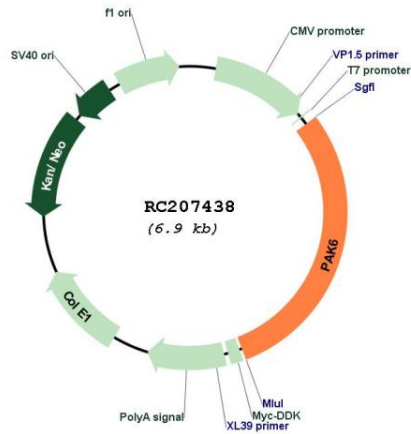
ORF Size: 2043 bp

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](#)

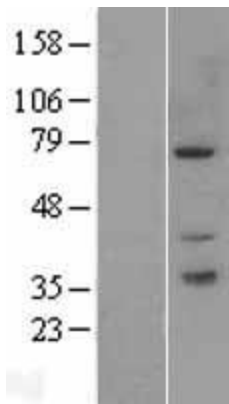
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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_020168.5
RefSeq Size:	3950 bp
RefSeq ORF:	2046 bp
Locus ID:	56924
UniProt ID:	Q9NQJ5
Cytogenetics:	15q15.1
Domains:	PBD, pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Axon guidance, ErbB signaling pathway, Focal adhesion, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway
MW:	74.9 kDa
Gene Summary:	This gene encodes a member of a family of p21-stimulated serine/threonine protein kinases, which contain an amino-terminal Cdc42/Rac interactive binding (CRIB) domain and a carboxyl-terminal kinase domain. These kinases function in a number of cellular processes, including cytoskeleton rearrangement, apoptosis, and the mitogen-activated protein (MAP) kinase signaling pathway. The protein encoded by this gene interacts with androgen receptor (AR) and translocates to the nucleus, where it is involved in transcriptional regulation. Changes in expression of this gene have been linked to prostate cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RC207438



Western blot validation of overexpression lysate (Cat# [LY426985]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226088] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).