

## Product datasheet for **RG207438**

### PAK6 (NM\_020168) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PAK6 (NM_020168) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAK6
Synonyms:	PAK5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG207438 representing NM\_020168  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTTCCGCAAGAAAAGAAGAAACGCCCTGAGATCTCAGCGCCACAGAAGCTCCAGCACCGTGTCCACA  
CCTCCTTCGACCCCAAAGAAGGCAAGTTTGTGGGCCTCCCCACAATGGCAGAACATCCTGGACACACT  
GCGGCGCCCAAGCCCGTGGTGGACCTTCGCGAATCACACGGGTGCAGCTCCAGCCCATGAAGACAGTG  
GTGCGGGGCAGCGCATGCCTGTGGATGGCTACATCTCGGGGCTGCTCAACGACATCCAGAAGTTGTGAG  
TCATCAGCTCCAACACCTGCGTGGCCGACGCCACCAGCCGGCGGGGCACAGTCCCTGGGGCTGCT  
GGGGGATGAGCACTGGGCCACCGACCCAGACATGTACCTCCAGAGCCCCAGTCTGAGCGCACTGACCCC  
CACGGCTCTACCTCAGTGAACGGGGCACACCAGCAGGCCACAAGCAGATGCCGTGGCCGAGCCAC  
AGAGCCACGGGTCTGCCAATGGGCTGGCTGCAAAGGCACAGTCCCTGGGCCCGCCGAGTTTCAGGG  
TGCTCGCAGCGTGTCTGCAGTGGGTGCTGCCTGCAGAGCTCCCACCAGGAGCTCGCCCCCAGC  
GGCACCATAGGCATGGAATGAAGGCTGCCAAGCATGGCTCTGAGGAGGCCCGGCCACAGTCTGCCTGG  
TGGGCTCAGCCACAGGCAGGCCAGGTGGGGAAGGCAGCCCTAGCCCTAAGACCCGGGAGAGCAGCCTGAA  
GCGCAGGCTATTCGAAGCATGTTCTGTCCACTGCTGCCACAGCCCCTCCAAGCAGCAGCAAGCCAGGC  
CCTCCACCACAGAGCAAGCCCAACTCCTCTTCCGACCGCCGAGAAAGACAACCCCAAGCCTGGTGG  
CCAAGGCCAGTCTTGCCTCGGACCAGCCGGTGGGGACCTTCAGCCCTCTGACCACTTCGGATACCAG  
CAGCCCCCAGAAGTCCCTCCGCACAGCCCCGGCCACAGGCCAGCTTCCAGGCCGGTCTTCCCCAGCGGA  
TCCCCCGCACCTGGCAGGCCAGATCAGCACCAGCAACCTGTACCTGCCCAGGACCCACGGTTGCCA  
AGGGTCCCTGGTGGTGGACACAGGTGTTGTGACACATGAGCAGTTCAAGGCTGCGTCAGGATGGT  
GGTGGACCAGGGTGACCCCGGCTGCTGCTGGACAGCTACGTGAAGATTGGCGAGGGCTCCACCGCATC  
GCTGCTTGGCCCGGAGAAGCACTCGGGCCGCCAGGTGGCCGTCAAGATGATGGACCTCAGGAAGCAGC  
AGCGCAGGGAGCTGCTCTTCAACGAGGTGGTATCATGCGGGACTACCAGCACTTCAACGTGGTGGAGAT  
GTACAAGAGCTACCTGGTGGCGAGGAGCTGTGGGTGCTCATGGAGTTCTGCAGGGAGGAGCCCTCACA  
GACATCGTCTCCAAGTCAGGCTGAATGAGGAGCAGATTGCCACTGTGTGTGAGGCTGTGCTGCAGGCC  
TGGCTACCTGCATGCTCAGGTGTCATCCACCGGACATCAAGAGTGACTCCATCCTGCTGACCCTCGA  
TGGCAGGGTGAAGCTCTCGGACTTCGGATTCTGTGCTCAGATCAGCAAAGACGTCCCTAAGAGGAAGTCC  
CTGGTGGGAACCCCTACTGGATGGCTCCTGAAGTGATCTCCAGGTCTTTGTATGCCACTGAGGTGGATA  
TCTGGTCTCTGGCATCATGGTATTGAGATGGTATGAGGGAGCCACCTACTTCAAGTACTCCCCAGT  
GCAAGCCATGAAGAGGCTCCGGGACAGCCCCCACCAGCTGAAAACTCTCACAAGGTCTCCCCAGTG  
CTGCGAGACTTCTGGAGCGGATGCTGGTGCAGGACCCCAAGAGAGAGCCACAGCCAGGAGCTCCTAG  
ACCACCCCTTCTGTCAGACAGGGCTACCTGAGTGCCTGGTGGCCCTGATCCAGCTCTACCGAAAGCA  
GACCTCCACCTGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG207438 representing NM\_020168  
 Red=Cloning site Green=Tags(s)

MFRKKKKRPEISAPQNFQHRVHTSFDPKKEGKVFGLPPQWQNILDTLRRPKPVVDPISRITRVQLQPMKTV  
 VRGAMPVDGYISGLLNDIQKLSVISSNTLRGRSPTSRRAQSLGLLGDEHWATDPDMLYQSPQSERTDP  
 HGLYLSCNGGTPAGHKQMPWPEPQSPRVLNGLAAKAQSLGPAEFQASQRCLQLGACLQSSPPGASPT  
 GTNRHGMKAAKHGSEEARPQSLVGSATGRPGGEGSPKTRSSLKRRLFRSMFLSTAATAPPSSSKPG  
 PPPQSKPNSSFRPPQKDNPPSLVAKAQLPSDQPVGTF SPLTTSDTSSPQKSLRTAPATGQLPGRSSPAG  
 SPRTWHAQISTSNLYLPQDPTVAKGALAGEDTGVVTHEQFKAALRMVVDQGDPRLLLLDSYVKIGEGSTGI  
 VCLAREKHSGRQVAVKMDLRKQQRRELLFNEVVIMRDYQHFNVVEMYKSYLVGEELWVLMFLQGGALT  
 DIVSQVRLNEEQIATVCEAVLQALAYLHAQVVIHRDIKSDSILLTLDGRVKLSDFGFCAQISKDVPKRKS  
 LVGTPYWMAPEVISRSLYATEVDIWSLGIEMVMDGEPYPYSDSPVQAMKRLRDSPPPKLNKSHKVSVP  
 LRDFLERMLVRDPQERATAQELLDHPFLLQTGLPECLVPLIQLYRKQTSTC

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_020168

**ORF Size:** 2043 bp

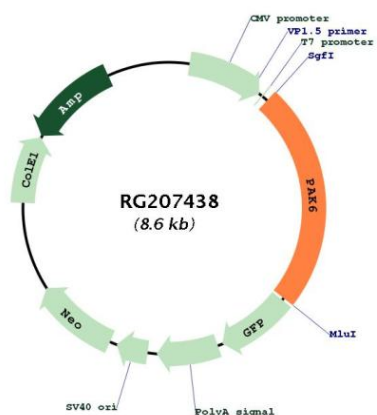
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_020168.5</a>
<b>RefSeq Size:</b>	3889 bp
<b>RefSeq ORF:</b>	2046 bp
<b>Locus ID:</b>	56924
<b>UniProt ID:</b>	<a href="#">Q9NQJ5</a>
<b>Cytogenetics:</b>	15q15.1
<b>Domains:</b>	PBD, pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Axon guidance, ErbB signaling pathway, Focal adhesion, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for RG207438