

Product datasheet for **RG234627**

PAK6 (NM_001276718) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAK6 (NM_001276718) 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)



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ORF Nucleotide Sequence:

>RG234627 representing NM_001276718
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTTCCGCAAGAAAAGAAGAAACGCCCTGAGATCTCAGCGCCACAGAAGCTCCAGCACCGTGTCCACA
 CCTCCTTCGACCCCAAAGAAGGCAAGTTTGTGGGCTCCCCACAATGGCAGAACATCCTGGACACACT
 GCGGGCCCAAGCCCGTGGTGGACCTTCGCGAATCACACGGGTGCAGCTCCAGCCATGAAGACAGTG
 GTGCGGGGACGCGATGCCTGTGGATGGCTACATCTCGGGGCTGCTCAACGACATCCAGAAGTTGTGAG
 TCATCAGCTCCAACACCTGCGTGGCCGACGCCACCAGCCGGCGGGCAGCTCCCTGGGGCTGCT
 GGGGGATGAGCACTGGGCCACCGACCCAGACATGTACCTCCAGAGCCCCAGTCTGAGCGCACTGACCCC
 CACGGCTCTACCTCAGTGAACGGGGCACACCAGCAGGCCACAAGCAGATGCCGTGGCCGAGCCAC
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 TGCTCGCAGCGTGTCTGCAGTGGGTGCTGCCTGCAGAGCTCCCACCAGGAGCTCGCCCCCAGC
 GGCACCAATAGGCATGGAATGAAGGCTGCCAAGCATGGCTCTGAGGAGGCCCGGCCACAGTCTGCCTGG
 TGGGCTCAGCCACAGGCAGGCCAGGTGGGGAAGGCAGCCCTAGCCCTAAGACCCGGGAGAGCAGCCTGAA
 GCGCAGGCTATTCGAAGCATGTTCTGTCCACTGCTGCCACAGCCCTCCAAGCAGCAGCAAGCCAGGC
 CCTCCACCACAGAGCAAGCCCAACTCCTCTTCCGACCGCCGAGAAAGACAACCCCAAGCCTGGTGG
 CCAAGGCCAGTCTTGCCTCGGACAGCCGGTGGGGACCTTCAGCCCTCTGACCACTTCGGATACCA
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 TGGCAGGGTGAAGCTCTCGGACTTCGGATTCTGTGCTCAGATCAGCAAAGACGTCCCTAAGAGGAAGTCC
 CTGGTGGGAACCCCTACTGGATGGCTCCTGAAGTGATCTCCAGTCTTTGTATGCCACTGAGGTCTCCC
 CAGTGTGCGAGACTTCTGGAGCGGATGCTGGTGGCGGACCCCAAGAGAGAGCCACAGCCAGGAGCT
 CCTAGACCACCCCTTCTGCTGCAGACAGGGCTACCTGAGTGCCTGGTGGCCCTGATCCAGCTTACCGA
 AAGCAGACCTCCACCTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

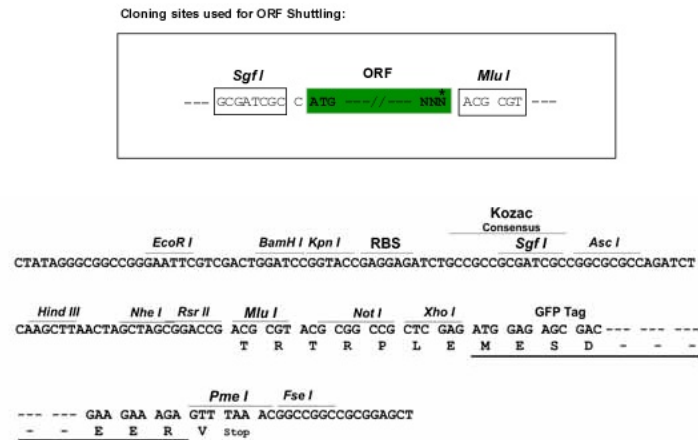
>RG234627 representing NM_001276718
 Red=Cloning site Green=Tags(s)

MFRKKKKRPEISAPQNFQHRVHTSFDPKEGKFVGLPPQWQNIIDTLRRPKPVVDPSTRITRVQLQPMKTV
 VRGSAMPVDGYISGLLNDIQKLSVISSNLRGRSPTSRRAQSLGLLGDEHWATDPDMLQSPQSERTDP
 HGLYLSCNGGTPAGHKQMPWPEPQSPRVLPNGLAAKAQSLGPAEFQASQRCLQLGACLQSSPPGASPT
 GTNRHGMAAKHGSEEARPQSLVGSATGRPGGEGSPSPKTRESSLKRRLFRSMFLSTAATAPPSSSKPG
 PPPQSKPNSSFRPPQKDNPPSLVAKAQLPSDQPVGTFSPLTTSSTSSPQKSLRTAPATGQLPGRSSPAG
 SPRTWHAQISTSNLYLPQDPTVAKGALAGEDTGVVTHEQFKAALRMVVDQDPRLLLDYSYKIGEGSTGI
 VCLAREKHSRQVAVKMDLRKQQRRELLFNEVVIMRDYQHFNVVEMYKSYLVGEELWVLMFLQGGALT
 DIVSQVRLNEEQIATVCEAVLQALAYLHAQGVIIHRDIKSDSILLTLDGRVKLSDFGFAQISKDVPKRKS
 LVGTPYWMPEVISRSLYATEVSPVLRDFLERMLVRDPQERATAQELLDHPFLQLTGLPECLVPLIQLYR
 KQTSTC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001276718

ORF Size: 1908 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_001276718.2](#)

RefSeq Size: 4228 bp

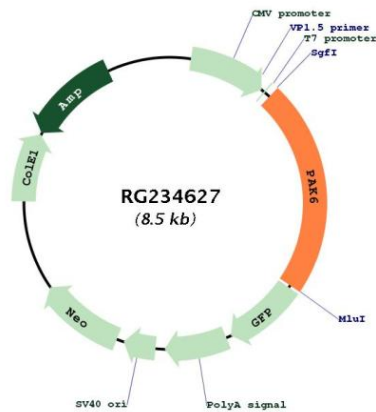
RefSeq ORF: 1911 bp

Locus ID: 56924

UniProt ID: [Q9NQU5](#)

Cytogenetics:	15q15.1
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
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 RG234627