

Product datasheet for **SC110589**

PAK5 (NM_020341) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAK5 (NM_020341) Human Untagged Clone
Tag:	Tag Free
Symbol:	PAK5
Synonyms:	PAK7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_020341 edited
ATGTTTGGGAAGAAAAAGAAAAAGATTGAAATATCTGGCCCGTCCAACCTTGAACACAGG
GTTCACTACTGGGTTTGTATCCACAAGAGCAGAAGTTTACCGGCCTTCCCCAGCAGTGGCAC
AGCCTGTTAGCAGATACGGCCAACAGGCCAAAGCCTATGGTGGACCTTCATGCATCACA
CCCATCCAGCTGGCTCCTATGAAGACAATCGTTAGAGGAAACAAACCCTGCAAGGAAACC
TCCATCAACGGCCTGCTAGAGGATTTTGACAACATCTCGGTGACTCGCTCCAACCTCCCTA
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GAAGAAAATGGCTTCATCACCTTCTCCAGTATTCCAGCGAATCCGATACTACTGCTGAC
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AGAGGCAGCCACGCAGCCAAGCAAAATGGGCACGTAATGAAAATGAAGCACGGGGAGGCC
TACTATTCTGAGGTGAAGCCTTTGAAATCCGATTTTGCCAGATTTTCTGCCGATTATCAC
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GGGACCAGCGGGTCTCCAAGGAGAGCCTGGCGTACAGTAAAAGTGAATGGGACCCAGC
CTGGATGACTATGACAGGAGGCCAAAGTCTTCGTACCTGAATCAGACAAGCCCTCAGCCC
ACCATGCGGCAGAGGTCCAGGTCAGGCTCGGGACTCCAGGAACCGATGATGCCATTTGGA
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TTGTCCGAGCCACAATGTGCATTCCAAAGGTGGATTACGATCGAGCACAGATGGTCCCTC
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GACCAGCAGCCCTCCAGGGTGTCCCATGAACAGTTTCGGGCGGCCCTGCAGCTGGTGGTC
AGCCCAGGAGACCCAGGGAATACTTGGCCAACCTTTATCAAAATCGGGGAAGGCTCAACC
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TACCACCATGACAATGTGGTTGACATGTACAACAGCTACCTTGTGCGGATGAGCTCTGG
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AACCAAGGAGTGATTCACAGGGACATAAAAAGTACTCCATCCTCCTGACAAGCGATGGC
CGGATAAAGTTGTCTGATTTTGGTTTCTGTGCTCAAGTTTCCAAAGAGGTGCCGAAGAGG
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GCGATGCGGAGGATCCGGGACAGTTTACCTCCAAGAGTGAAGGACCTACACAAGGTTTCT
TCAGTGTCCGGGATTCCTAGACTTGATGTTGGTGGAGGAGCCCTCTCAGAGAGCAACA
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CGGCCCGGTCATAGCTGTTTCTGAACAGATCCCGGGTGGCATCCCTGTGACCCCTCCC
CAGTGCTCTCCTGGCCCTGGAAGTTGCCACTCCAGTGCCACCAGCCTTGTCTAATAA
AATTAAGTTGCA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_020341 unedited
 GGATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCATGTTTGGG
 AAGAAAAAAAAAATTGAAATATCTGGCCCGTCCAACCTTTGAACACAGGGTTCATACTGG
 GTTTGATCCACAAGAGCAGAAGTTTACCGGCCTCCCCAGCAGTGGCACAGCCTGTTAGC
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 GGCTCCTATGAAGACAATCGTTAGAGGAAACAAACCCTGCAAGGAAACCTCCATCAACGG
 CCTGCTAGAGGATTTTGACAACATCTCGGTGACTCGCTCCAACCTCCCTAAGGAAAGAAAG
 CCCACCCACCCAGATCAGGGAGCCTCCAGCCACGGTCCAGGCCACGCGGAAGAAAATGG
 CTTTCATCACCTTCTCCAGTATTCCAGCGAATCCGATACTACTGCTGACTACACGACCGA
 AAAGTACAGGGAGAAGAGTCTCTATGGAGATGATCTGGATCCGTATTATAGAGGCAGCCA
 CGCAGCCAAGCAAAATGGGCACGTAATGAAAATGAAGCACGGGGAGGCCTACTATTCTGA
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 TAGCTCCCCTCTGGATTATTCATTCCAATTCACACCTTCTAGAAGTGCANGGACCAGCGG
 GTGCTCCAAGGAGAGCCTGGCGTACAGTAAAAGTGAATGGGGACCCAGCCTGGATGACTA
 TGACAGGGAGGCCAAAGTCTTCGTACCTGAATCAGACAGCCCTCAGNCCACATGCNGCAG
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 ACCATNNCCAGGAACTCTACACTNCTACACTACCTTNGTTGTCGAGCCACATT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_020341 unedited
 NNAAATTACTGTGNACCGCGCCGATTCTAGATCGAGTTTTTTTTTTTTTTTTTTTGGCAG
 AAAAGTTTCTTTCAATATAGAAAACCTACATGTTACCCTGCATGTGGCTAGGATATATCA
 TAACGGAGTTTGTACTGAGTCTTCTGATTTGCTGGATGAAGGGCTGAAAATATAATAA
 TGACTTATAAAGCCGTGCTCCAAGTGACCACACCCGGCTGTCAGTGGAGAGATGCCTGTT
 TAAGACACAAGAAGATGCCCTGGTCTGTTGAACCCTGCCGGTATCACGCTGTCCCACCA
 ATGGCTGGTCTAGAATGCACAGGCCTTTTGCATGTTCTGTGTTTCTTTTGTTCCTCTG
 AATTATTCTCATGTCCTCATCTAGCTTTGCCACCTACACGAATCCTCTGCTCAGTGATGC
 CTGTATTGTCTCATGAGGGGGACGATGCAAGACGGTGGACCTGCTAGTTTTAAGAATGGA
 TGTCCGAGGAGTTCTCGGCTGTTGCTCTCTGAGAGGGCTCCCTACCAACATCAAGTCT
 AGGAATCCCCGGAGCACTGAAGAAACCTTGTGTAGTCCCTTCACTTTGGAGGTAACCTG
 TCCCGGATCCTCCGCATCGCCTGGAGGGGAGGCTCATTGAAGTAGGGGGCTCGCCATCA
 ATCATTCTATACCATGATCCCAGGGACCAGATGTCCACCTCAGGGGCCATCCAGTAN
 GGAGTGCCAACCAATGATTTCTCTTCCGACCTCTTTGGNAACTTGAGCACAGAAAACCA
 AAATCAGACAACCTATCCGGCCATCGCTTGTGAGGAGGATGGAGTCACTTTTTATGTCC
 TGTGAACACTCCTTGTATGAAGTTAGAGAGAGCTCTCAAACCTGACGGCAGACATAGCT
 T

Restriction Sites:

NotI-NotI

ACCN:

NM_020341

Insert Size:

2600 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<u>NM_020341.2</u> , <u>NP_065074.1</u>
RefSeq Size:	4655 bp
RefSeq ORF:	2160 bp
Locus ID:	57144
UniProt ID:	<u>Q9P286</u>
Cytogenetics:	20p12.2
Domains:	PBD, pkinase
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:	<p>The protein encoded by this gene is a member of the PAK family of Ser/Thr protein kinases. PAK family members are known to be effectors of Rac/Cdc42 GTPases, which have been implicated in the regulation of cytoskeletal dynamics, proliferation, and cell survival signaling. This kinase contains a CDC42/Rac1 interactive binding (CRIB) motif, and has been shown to bind CDC42 in the presence of GTP. This kinase is predominantly expressed in brain. It is capable of promoting neurite outgrowth, and thus may play a role in neurite development. This kinase is associated with microtubule networks and induces microtubule stabilization. The subcellular localization of this kinase is tightly regulated during cell cycle progression. Alternatively spliced transcript variants encoding the same protein have been described. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) represents the longer transcript. This variant and variant 2 encode the same protein.</p>