

Product datasheet for **RN203432**

Pak7 (NM_001107781) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pak7 (NM_001107781) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Pak7
Synonyms:	PAK-5; PAK-7; Pak5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>RN203432 representing NM_001107781

Red=Cloning site Blue=ORF Orange=Stop codon

 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

 ATGTTTGGGAAGAAAAAGAAAAAGATCGAAATATCCGGCCCATCTAACTTTGAACACAGGGTTCATACTG
 GGTTCGATCCACAAGAGCAGAAGTTTACTGGCCTTCCCCAGCAGTGCCACAGCCTGTTAGCAGACACAGC
 CAACAGGCCCAAGCCTATGGTGGATCCATCATGCATCACACCCATACAACCTGGCTCCCATGAAGACAATC
 GTCAGAGGAAATAAATCTGCAAGGAAAGCTCTATCAACGGTCTGCTAGAGGATTTGACAAACATCTCCG
 TGACTCGTCCAACCTCCCTAAGGAAAGAAAGCCACCCACCCAGATCAGGGAGCAGCTAGCCGATTCA
 AGGCCACTCCGAAGAAACGGCTTCATTACTTTCTCACAATATTCTAGTGAATCTGATACTACTACGGAC
 TACAACTGAAAGTATAGAGACAGGAGTCTCTATGGAGACGACCTGGATCTGTACTATAGAGGCAGCC
 ATGCAGCCAAGCAAAACGGGCATGCTATGAAGATGAAACATGGAGATGCCTACTATCCTGAGATGAAGCC
 TTTGAAATCCGACCTGGCCAGATTCCCTGTCGACTATCACACACACTTGGACTCGCTGAGCAAAGCAAGT
 GAGTACGGTGACCTCAAGTGGGATTATCAGCGAGCCTCCAGTAGCTCCCTCTGGACTACTCATTCCAGC
 TCACGCCTTCAGAAGTGCAGGGACAGCAGGTGCTCCAAGGAGAGTCTGGCATACAGTGAAGTGATTG
 GGGACCCAGCTTTGATGACTATGATAGGAGGCCAAATCATCCTACCTGCATCAGACAAGCCCTCAGCCA
 GCCATGCGCCAGAGATCCAAGTCAGGCTCAGGGCTTCAGGAACCCATGATGCCATTTGGAGCAAGTGCAT
 TTAAGTCACTCTCAAGGACACTCGTACAACCTCTACACCTACCTCGATTGTCTGAGCCCAATGTG
 CATTCCAAAGGTGGATTATGATCGAGCACAGATGGTCTTCAGTCTCCACTGTCAGGGTCCGACACCTAT
 CCCAGAGGCCCCACCAAACTACCTCAAAGTCAAAGCAAAGTGGGCTACTCTTCAAGTAGCCACAGTATC
 CTGGGTACCAAAAGCATCCCTATACCATCATCCGTCCTGCAAACAGTTCTCAGTACATCTCCACCGC
 TTCTTACTTGAGCTCTCTCAGTATCTCCTCGAGCACCTACCCTCCACCCAGCTGGGGCTCCTCTTCAGAC
 CAGCAGCCCTCTAGGGTATCCCATGAACAGTTTCGAGCTGCCCTGCAACTGGTGGTCAGCCAGGAGACC
 CCAGGGAATATTTGGATAACTTTATTAATAATCGGAGAAGGGTCGACAGGCATCGTGTGATTGCAACAGA
 GAAGCACACAGGCAAGCAAGTGGCGGTGAAGAAATGGACCTCCGAAAGCAACAGAGACGGGAACCTCTT
 TTAATGAGGTCGTGATAATGCGTGATTACCACCATGACAATGTAGTTGACATGTATAACAGCTACCTTG
 TTGGAGATGAGCTCTGGGTGGTCATGGAGTTTCTAGAAGGTGGTGCCTTGACAGACATCGTCACTCATA
 CAGATGAATGAAGAACAGATAGCTACTGTCTGCCTGTGAGTTCTGAAAGCGCTGCTCTACCTTCATAAC
 CAAGGAGTGATTACAGGACATAAAGAGTGACTCCATTCTTCTGACAAGCGATGGCCGGATAAAGTTAT
 CTGACTTTGGCTTCTGTGCTCAAGTTTCCAAAGAGGTGCCAAAGAGGAAGTCACTGGTGGGTACCCATA
 CTGGATGGCTCCTGAGGTGATTTCCAGGCTACCTTATGGGACAGAGGTGGACATCTGGTCCCTCGGGATA
 ATGGTGATAGAGATGATTGATGGTGAGCCTCCCTATTTCAATGAGCCTCCTCTGCAGGCCATGAGGAGGA
 TCCGGGACAGTTTACCTCCAAGAGTGAAGGACCTGCACAAGGTTTCTTCCATGCTCCGAGGATTCCTAGA
 TCTTATGTTGGTGAGGGAGCCCTCTCAAAGAGCCACAGCTCAAGAAGTTCTTGGACATCCATTCTTAAAA
 TTGGCAGGCCCGCCATCTTGCATCGTTCCTCATGAGACAATATAGGCATC**ACA**
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_001107781

Insert Size:

2157 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:	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_001107781.1, NP_001101251.1</u>
RefSeq Size:	4040 bp
RefSeq ORF:	2157 bp
Locus ID:	311450
UniProt ID:	<u>D4A280</u>
Cytogenetics:	3q36
Gene Summary:	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, proliferation or cell survival. Activation by various effectors including growth factor receptors or active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates the proto-oncogene RAF and stimulates its kinase activity. Promotes cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Phosphorylates CTNND1, probably to regulate cytoskeletal organization and cell morphology. Keeps microtubules stable through MARK2 inhibition and destabilizes the F-actin network leading to the disappearance of stress fibers and focal adhesions (By similarity). [UniProtKB/Swiss-Prot Function]