

## Product datasheet for **RR215653**

### **Pak2 (NM\_053306) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pak2 (NM_053306) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pak2
Synonyms:	gamma-PAK; PAK-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR215653 representing NM\_053306  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCTGATAACGGGGAGCTAGAGGACAAGCCCCAGCACCTCCAGTGGGATGAGCAGCACCATTTTTA  
 GCACTGGAGGAAAGGATCCTTTATCAGCCAATCACAGTTTGAAGCCTTTGCCTTCTGTTCCAGAGGAAAA  
 AAAACCGAGGAACAAAATCATCTCCATATTCTCAAGCACAGAAAAAGGAAGTAAAAAGAAAGAAAAAGAA  
 CGGCCAGAGATTTCTCCGCCGTCTGATTTTGAAGTATACCATCCATGTTGGCTTTGATGCTGTACGGGAG  
 AGTTCACTGGCATGCCAGAGCAGTGGGCACGGCTGTTGCAGACCTCCAACATTACCAAATGGAGCAGAA  
 GAAGAACCCGAGGCTGTGCTGGATGTCTTGAAGTTCTACGACTCCAACACTGTGAAGCAGAAGTACCTG  
 AGTTCCTCCTCCTGAGAAAGATGGCTTTCTTCTGGAACACCAGCACTGAACACCAAGGGGTGAGAGA  
 CATCAGCTGTGGTGACAGAGGAAGACGATGACGATGAAGATGCTGCTCCTCCCGTATTGCCCTCGGCC  
 AGATCATACAAAATCAATCTACACAAGGTCTGTATCGACCCTATTCTGCTCCAGTTGGTGACTCTAAT  
 GTCGACAGTGGTCCAAAGTCTTCAGACAAACAGAAAAAGAAAGCCAAGATGACCGATGAAGAGATTATGG  
 AGAAATTAAGAACTATTGTGAGCATAGGTGACCCTAAGAAAAAATACACAAGATATGAAAAAATCGGGCA  
 AGGGGCTTCTGGTACAGTTTTACTGCAACTGATGTGGCCTGGGGCAAGAGGTTGCTATCAAGCAGATT  
 AATTTACAGAAACAACCAAGAAGGAAATGATCATTAAATGAAATCTGGTATGAAGGAGTTAAAGAATC  
 CCAACATAGTTAACTTCTGGACAGTTACCTGGTAGGAGACGAGTTGTTTGGTAAATGGAGTACCTTGC  
 TGGTGGTCCCTCACTGATGTCGTGACAGAAACCTGCATGGATGAAGCGCAGATCGCAGCTGTGTGAGA  
 GAGTGTTTACAGCGCTTGGAGTTTTACATGCTAATCAAGTATCCACAGAGACATCAAAAGTGACAATG  
 TGCTTTTGGGAATGGAAGGCTCAGTTAACTCACTGATTTTGGCTTCTGTGCCAGATCACCCCTGAACA  
 GAGCAAAACGCAGTACAATGGTTGGAACGCCATACTGGATGGCACCGGAGGTAGTACACGGGGAAGCCTAT  
 GGCCCAAAGTTGACATATGGTCTCTGGGCATCATGGCTATCGAAATGGTGAAGGAGAGCCTCCATACC  
 TCAATGAAAATCCTTTACGGGCATTATACCTGATAGCAACGAATGGAACACCTGAGCTCCAGAAATCCAGA  
 AAAACTTTCCCCATATTTCCGGATTTCTAAATCGGTGTTTGGAAATGGATGTGGAGAAGAGGGTTCA  
 GCCAAAGAACTATTACAGCATCCTTTCTGAACTGGCCAAACCATTATCCAGCTTGACGCCTCTGATCC  
 TGGCAGCTAAAGAAGCAATGAAGGTAACCGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR215653 representing NM\_053306  
 Red=Cloning site Green=Tags(s)

MSDNGELEDKPPAPPVMSSTIFSTGGKDPLSANHSLKPLPSVPEEKKPRNKIISIFSSTEKGSKKKEKE  
 RPEISPPSDFEYTIHVGFDAVTGEFTGMPEQWARLLQTSNITKLEQKKNPQAVLDVLFYDSNTVKQKYL  
 SFTPEKDFPSGTPALNTKGSETSAVVTEEDDDDEDAAPPVIAAPRPDHTKSIYTRSVIDPPIAPVGDNS  
 VDSGAKSSDKQKKKAKMTDEEIMEKLRITIVSIGDPKPKKYTRYEKIGQGASGTVFTATDVALGQEVAIKQI  
 NLQKQPKKELIINEILVMKELKNPNIVNFDLSYLVGDEL FVMEYL AGGSLTDVVTETCMDEAQIAAVCR  
 ECLQALEFLHANQVIHRDIKSDNVLLGMEGSVKLTDGFCAQITPEQSKRSTMVGTPTYWMAPEVVTREAY  
 GPKVDIWSLGIEMVEGEPYLNENPLRALYLIATNGTPELQNPPEKLSPIFRDFLNRCLEMDVEKRG  
 AKELLQHPFLKLAKPLSSLTPLILAAKEAMKSNR

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

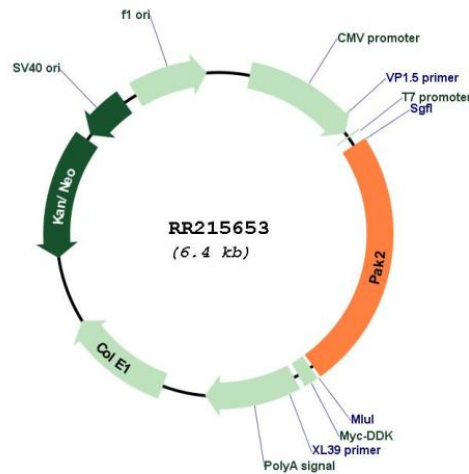
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_053306
<b>ORF Size:</b>	1572 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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_053306.3</a> , <a href="#">NP_445758.2</a>
<b>RefSeq Size:</b>	1815 bp
<b>RefSeq ORF:</b>	1575 bp
<b>Locus ID:</b>	29432
<b>UniProt ID:</b>	<a href="#">Q64303</a>
<b>Cytogenetics:</b>	11q22
<b>MW:</b>	58 kDa
<b>Gene Summary:</b>	mitogen activated protein kinase that mediates bFGF-induced neurite outgrowth via activation by ERK kinase [RGD, Feb 2006]