

## Product datasheet for **SC301963**

### PAK4 (NM\_001014835) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PAK4 (NM\_001014835) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** PAK4  
**Vector:** pCMV6 series  
**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001014835, the custom clone sequence may differ by one or more nucleotides

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ATGTTTGGGAAGAGGAAGAAGCGGGTGGAGATCTCCGCGCCGTCCAACCTCGAGCACCGC  
GTGCACACGGGCTTCGACCAGCACGAGCAGAAGTTCACGGGGCTGCCCGCCAGTGGCAG  
AGCCTGATCGAGGAGTCGGCTCGCCGGCCCAAGCCCTCGTCGACCCCGCTGCATCACC  
TCCATCCAGCCCGGGGCCCCCAAGGGGAGCCTCATGACGTGGCCCTAACGGGCCATCA  
GCGGGGGGCTGGCCATCCCCAGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT  
CGAGGTGCCCCAGCCCTGGAGTGTCTGGACCCACGCCTCAGAGCCCGCTGCCCCCT  
CCAGCCTGCACCCCGCCCGCCCTGCTGTCTCTGGGCCCTGGCCCGCTCACCACAG  
CGGGAGCCACAGCGAGTATCCCATGAGCAGTTCGGGGCTGCCCTGCAGCTGGTGGTGAC  
CCAGGCGACCCCGCTCTTACCTGGACAACCTCATCAAGATTGGCGAGGGCTCCACGGGC  
ATCGTGTGCATCGCCACCGTGCAGCTCGGGCAAGCTGGTGGCCGTCAAGAAGTGGAC  
CTGCGCAAGCAGCAGAGGCGGAGCTGCTCTTCAACGAGGTGGTAAATCATGAGGGACTAC  
CAGCACGAGAATGTGGTGGAGATGTACAACAGTACCTGGTGGGGGACGAGCTCTGGGTG  
GTCATGGAGTTCCTGGAAGGAGGCGCCCTCACCACATCGTCACCCACACCAGGATGAAC  
GAGGAGCAGATCGCGCCGTGTGCCTTGCAGTGTGCAGGCCCTGTCGGTGTCCACGCC  
CAGGGCGTCATCCACGGGACATCAAGAGCGACTCGATCCTGCTGACCCATGATGGCAGG  
GTGAAGCTGTGAGACTTTGGGTTCTGCGCCAGGTGAGCAAGGAAGTGCCCGAAGGAAG  
TCGCTGGTGGCAGCCCTACTGGATGGCCCCAGAGCTCATCTCCCGCTTCCCTACGGG  
CCAGAGGTAGACATCTGGTCTGGGGATAATGGTGATTGAGATGGTGGACGGAGAGCCC  
CCCTACTTCAACGAGCCACCCCTCAAAGCCATGAAGATGATTGGGACAACCTGCCACCC  
CGACTGAAGAACCTGCACAAGGTGTCGCCATCCCTGAAGGGCTTCTGGACCGCTGTGTG  
GTGCGAGACCTGCCAGCGGGCCACGGCAGCCGAGCTGCTGAAGCACCATTCTGGCC  
AAGGCAGGGCCGCTGCCAGCATCGTCCCTCATGCGCCAGAACCACAGATGA
```

**Restriction Sites:** Please inquire  
**ACCN:** NM\_001014835  
**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).



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<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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_001014835.1</a> , <a href="#">NP_001014835.1</a>
<b>RefSeq Size:</b>	2379 bp
<b>RefSeq ORF:</b>	1317 bp
<b>Locus ID:</b>	10298
<b>UniProt ID:</b>	<a href="#">O96013</a>
<b>Cytogenetics:</b>	19q13.2
<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>PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 interacts specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family of MAP kinases. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (4) lacks an in-frame exon in the coding region, as compared to variant 1. The encoded isoform (2) thus lacks an internal segment, as compared to isoform 1.</p>