

Product datasheet for **SC323141**

PAK3 (NM_001128172) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: PAK3 (NM_001128172) Human Untagged Clone
Tag: Tag Free
Symbol: PAK3
Synonyms: ARA; beta-PAK; bPAK; MRX30; MRX47; OPHN3; PAK-3; PAK3beta
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_001128172, the custom clone sequence may differ by one or more nucleotides

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ATGTCTGACGGTCTGGATAATGAAGAGAAACCCCGGCTCCTCCACTGAGGATGAATAGT
AACCAACCGGGATTCTTCAGCACTCAACCACAGCTCCAACCACTTCCCATGGCCCCTGAA
GAGAAGAATAAGAAAGCCAGGCTTCGCTCTATCTTCCCAGGAGGAGGGGATAAAACCAAT
AAGAAGAAGGAGAAAGAGCGCCAGAGATCTCTCTTCCCTCAGACTTTGAGCATAACGATT
CATGTGGGGTTTGTGTCAGTCACCGGGGAATCACTAACTCCCCTTTCCAGACCTCTAGA
CCTGTGACGGTCGCTTCAAGTCAATCAGAGGGAAAAATGGGAATCCAGAGCAATGGGCA
CGATTACTCCAACTTCCAACATAACAAAATTGGAACAGAAGAAGAACCCACAAGCTGTT
CTAGATGTTCTCAAATCTATGATTCCAAAGAAACAGTCAACAACAGAAATACATGAGC
TTTACATCAGGAGATAAAAGTGCACATGGATACATAGCAGCCATCCTTCGAGTACAAAA
ACAGCATCTGAGCCTCCATTGGCCCCTCCTGTGTCTGAAGAAGAAGATGAAGAGGAAGAA
GAAGAAGAAGATGAAAATGAGCCACCACCAGTTATCGCACCAAGACCAGAGCATAAAAA
TCAATCTATACTCGTTCTGTGGTTGAATCCATTGCTTCACCAGCAGTACCAAATAAAGAG
GTCACACCACCCTCTGCTGAAAAATGCCAATTCAGTACTTTGTACAGGAACACAGATCGG
CAAAGAAAAAATCCAAGATGACAGATGAGGAGATCTTAGAGAAGCTAAGAAGCATTGTG
AGTGTTGGGGACCCAAAGAAAAAATACACAAGATTTGAAAAAATGGTCAAGGGGCATCA
GGTACTGTTTATACAGCACTAGACATTGCAACAGGACAAGAGGTGGCCATAAAGCAGATG
AACCTTCAACAGCAACCCAAGAAGGAATTAATTATTAATGAAATTCGGTCATGAGGGAA
AATAAGAACCCTAATATTGTTAATTATTTAGATAGCTACTTGGTGGGTGATGAACTATGG
GTAGTCATGGAATACTTGGCTGGTGGCTCTCTGACTGATGTGGTCACAGAGACCTGTATG
GATGAAGGACAGATAGCAGCTGTCTGCAGAGAGTGCTGCAAGCTTTGGATTTCTGCAC
TCAAACCAGGTGATCCATAGAGATATAAAGAGTGACAATATTCTCTCGGGATGGATGGC
TCTGTTAAATTGACTGACTTTGGGTTCTGTGCCAGATCACTCCTGAGCAAAGTAAACGA
AGCACTATGGTGGGAACCCCATATTGGATGGCACCTGAGGTGGTACTCGAAAAGCTTAT
GGTCCGAAAGTTGATATCTGGTCTCTTGAATTATGGCAATTGAAATGGTGGAGGTGAA
CCCCCTTACCTTAATGAAATCCACTCAGGGCATTGTATCTGATAGCCACTAATGGAAT
CCAGAGCTCCAGAATCCTGAGAGACTGTCAGCTGTATTCCGTGACTTTTTAAATCGCTGT
CTTGAGATGGATGTGGATAGGCGAGGATCTGCCAAGGAGCTTTTGCAGCATCCATTTTAA
AAATTAGCCAAGCTCTCTCCAGCCTGACTCCTCTGATTATCGCTGCAAAGGAAGCAATT
AAGAACAGCAGCCGC
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| Restriction Sites: | Please inquire |
| ACCN: | NM_001128172 |
| 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). |
| OTI Annotation: | 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. |
| 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: | NM_001128172.1 , NP_001121644.1 |
| RefSeq Size: | 2223 bp |
| RefSeq ORF: | 1698 bp |
| Locus ID: | 5063 |
| UniProt ID: | O75914 |
| Cytogenetics: | Xq23 |
| Protein Families: | Druggable Genome, Protein Kinase, Stem cell - Pluripotency |
| 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 serine-threonine kinase and forms an activated complex with GTP-bound RAS-like (P21), CDC2 and RAC1. This protein may be necessary for dendritic development and for the rapid cytoskeletal reorganization in dendritic spines associated with synaptic plasticity. Defects in this gene are the cause of a non-syndromic form of X-linked intellectual disability. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2017]</p> <p>Transcript Variant: This variant (5) has a shorter 5' UTR and contains an alternate in-frame exon compared to variant 1. It encodes isoform c which is longer than isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p> |