

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 PAK4 Symbol:

Vector: pCMV6 series

>NCBI ORF sequence for NM_001014835, the custom clone sequence may differ by one or **Fully Sequenced ORF:**

more nucleotides

ATGTTTGGGAAGAGGAAGAGCGGGTGGAGATCTCCGCGCCCGTCCAACTTCGAGCACCGC GTGCACACGGGCTTCGACCAGCACGAGCAGAAGTTCACGGGGCTGCCCCGCCAGTGGCAG AGCCTGATCGAGGAGTCGGCTCGCCGGCCCAAGCCCCTCGTCGACCCCGCCTGCATCACC TCCATCCAGCCCGGGGCCCCCAAGGGGGAGCCTCATGACGTGGCCCCTAACGGGCCATCA GCGGGGGCCTGGCCATCCCCAGTCCTCCTCCTCCTCCTCCCGGCCTCCCACCCGAGCC CGAGGTGCCCCAGCCCTGGAGTGCTGGGACCCCACGCCTCAGAGCCCCAGCTGGCCCCT CCAGCCTGCACCCCGCCGCCCCTGCTGTTCCTGGGCCCCCTGGCCCCCGCTCACCACAG CGGGAGCCACAGCGAGTATCCCATGAGCAGTTCCGGGCTGCCCTGCAGCTGGTGGTGGAC CCAGGCGACCCCGCTCCTACCTGGACAACTTCATCAAGATTGGCGAGGGCTCCACGGGC ATCGTGTGCATCGCCACCGTGCGCAGCTCGGGCAAGCTGGTGGCCGTCAAGAAGATGGAC CTGCGCAAGCAGCAGAGGCGCGAGCTGCTCTTCAACGAGGTGGTAATCATGAGGGACTAC CAGCACGAGAATGTGGTGGAGATGTACAACAGCTACCTGGTGGGGGACGAGCTCTGGGTG GTCATGGAGTTCCTGGAAGGAGGCGCCCTCACCGACATCGTCACCCACACCAGGATGAAC GAGGAGCAGATCGCGGCCGTGTGCCTTGCAGTGCTGCAGGCCCTGTCGGTGCTCCACGCC CAGGGCGTCATCCACCGGGACATCAAGAGCGACTCGATCCTGCTGACCCATGATGGCAGG TCGCTGGTCGGCACGCCCTACTGGATGGCCCCAGAGCTCATCTCCCGCCTTCCCTACGGG CCAGAGGTAGACATCTGGTCGCTGGGGATAATGGTGATTGAGATGGTGGACGGAGAGCCC CCCTACTTCAACGAGCCACCCCTCAAAGCCATGAAGATGATTCGGGACAACCTGCCACCC CGACTGAAGAACCTGCACAAGGTGTCGCCATCCCTGAAGGGCTTCCTGGACCGCCTGCTG GTGCGAGACCCTGCCCAGCGGGCCACGGCAGCCGAGCTGCTGAAGCACCCATTCCTGGCC AAGGCAGGCCCCCCAGCATCGTGCCCCTCATGCGCCAGAACCGCACCAGATGA

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).



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

PAK4 (NM_001014835) Human Untagged Clone - SC301963

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: 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 001014835.1</u>, <u>NP 001014835.1</u>

 RefSeq Size:
 2379 bp

 RefSeq ORF:
 1317 bp

 Locus ID:
 10298

 UniProt ID:
 096013

 Cytogenetics:
 19q13.2

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: 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 INK 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] 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.