

Product datasheet for RC222595L4

OriGene Technologies, Inc.

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PAK3 (NM_002578) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PAK3 (NM_002578) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PAK3

Synonyms: ARA; beta-PAK; bPAK; MRX30; MRX47; OPHN3; PAK-3; PAK3beta

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

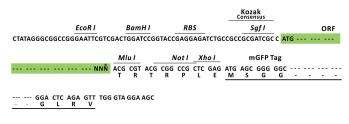
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC222595).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_002578

ORF Size: 1632 bp





OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. More info

OTI Annotation:

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

Cytogenetics:

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 002578.2</u>

 RefSeq Size:
 2516 bp

 RefSeq ORF:
 1635 bp

 Locus ID:
 5063

 UniProt ID:
 075914

Domains: PBD, pkinase, TyrKc, S_TKc

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

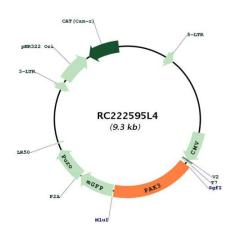
MW: 60.5 kDa



Gene Summary:

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]

Product images:



Circular map for RC222595L4