

Product datasheet for MR225427L3

Pak3 (NM_001195048) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Pak3 (NM 001195048) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Pak3

Synonyms: PAK-3; Pak65alpha; Pak65beta; Stk4

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR225427).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001195048

ORF Size: 1677 bp



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Pak3 (NM_001195048) Mouse Tagged Lenti ORF Clone - MR225427L3

OTI Disclaimer: 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: 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 001195048.1, NP 001181977.1</u>

 RefSeq Size:
 8352 bp

 RefSeq ORF:
 1680 bp

 Locus ID:
 18481

 UniProt ID:
 Q61036

Cytogenetics: X F2

Gene Summary:

Serine/threonine protein kinase that plays a role in a variety of different signaling pathways

including cytoskeleton regulation, cell migration, or cell cycle regulation. Plays a role in

dendrite spine morphogenesis as well as synapse formation and plasticity

(PubMed:25851601). Acts as downstream effector of the small GTPases CDC42 and RAC1. Activation by the binding of active CDC42 and RAC1 results in a conformational change and a

subsequent autophosphorylation on several serine and/or threonine residues.

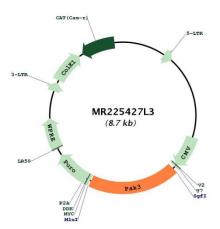
Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration. Additionally, phosphorylates

TNNI3/troponin I to modulate calcium sensitivity and relaxation kinetics of thin myofilaments.

May also be involved in early neuronal development.[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR225427L3