

## **Product datasheet for SR417065**

### OriGene Technologies, Inc.

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## Pak3 Mouse siRNA Oligo Duplex (Locus ID 18481)

### **Product data:**

**Product Type:** siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

**Stability:** One year from date of shipment when stored at -20°C.

# of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

**Note:** Single siRNA duplex (10nmol) can be ordered.

RefSeq: NM 001195046, NM 001195047, NM 001195048, NM 001195049, NM 008778

UniProt ID: Q61036

Synonyms: PAK-3; Pak65alpha; Pak65beta; Stk4

Components: Pak3 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 18481)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml

**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]





# Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).