

Product datasheet for TF320637

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PAK4 Human shRNA Plasmid Kit (Locus ID 10298)

Product data:

Product Type: shRNA Plasmids

Product Name: PAK4 Human shRNA Plasmid Kit (Locus ID 10298)

Locus ID: 10298

Vector: pRFP-C-RS (TR30014)

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

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: PAK4 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 10298).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001014831, NM 001014832, NM 001014833, NM 001014834, NM 001014835,

NM 005884, NM 005884.1, NM 005884.2, NM 005884.3, NM 001014831.1, NM 001014831.2, NM 001014834.1, NM 001014834.2, NM 001014832.1, NM 001014835.1, NM 001014833.1,

BC011368, BC011368.1, BC025282, BC025282.1, BC002921, BC034511, BM129363, NM 001014831.3, NM 001014834.3, NM 001014832.2, NM 005884.4, NM 001014835.2

UniProt ID: <u>096013</u>

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 JNK 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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).