

Product datasheet for TF320694

OriGene Technologies, Inc.

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VRK3 Human shRNA Plasmid Kit (Locus ID 51231)

Product data:

Product Type: shRNA Plasmids

Product Name: VRK3 Human shRNA Plasmid Kit (Locus ID 51231)

Locus ID: 51231

Vector: pRFP-C-RS (TR30014)

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

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: VRK3 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 51231).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001025778, NM 001308420, NM 016440, NM 001025778.1, NM 016440.1, NM 016440.2,

NM 016440.3, BC095449, BC003546, BC023556, NM 016440.4

UniProt ID: Q8IV63

Summary: This gene encodes a member of the vaccinia-related kinase (VRK) family of serine/threonine

protein kinases. In both human and mouse, this gene has substitutions at several residues within the ATP binding motifs that in other kinases have been shown to be required for catalysis. In vitro assays indicate the protein lacks phosphorylation activity. The protein, however, likely retains its substrate binding capability. This gene is widely expressed in human tissues and its protein localizes to the nucleus. Alternative splicing results in multiple

transcripts encoding different isoforms. [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 custom shRNA service.



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).