

Product datasheet for **TR302697**

PANK2 Human shRNA Plasmid Kit (Locus ID 80025)

Product data:

Product Type:	shRNA Plasmids
Product Name:	PANK2 Human shRNA Plasmid Kit (Locus ID 80025)
Locus ID:	80025
Synonyms:	C20orf48; HARP; HSS; NBIA1; PKAN
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PANK2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 80025). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001324191 , NM_001324192 , NM_001324193 , NM_024960 , NM_153637 , NM_153638 , NM_153639 , NM_153640 , NM_153641 , NR_136715 , NM_153638.1 , NM_153638.2 , NM_153638.3 , NM_153640.1 , NM_153640.2 , NM_153640.3 , NM_024960.1 , NM_024960.2 , NM_024960.3 , NM_024960.4 , NM_024960.5 , NM_153637.1 , BC009421 , BC065019 , BC093633 , BC101569 , BC101571 , BC107724 , BC142976 , NM_024960.6
UniProt ID:	Q9BZ23
Summary:	This gene encodes a protein belonging to the pantothenate kinase family and is the only member of that family to be expressed in mitochondria. Pantothenate kinase is a key regulatory enzyme in the biosynthesis of coenzyme A (CoA) in bacteria and mammalian cells. It catalyzes the first committed step in the universal biosynthetic pathway leading to CoA and is itself subject to regulation through feedback inhibition by acyl CoA species. Mutations in this gene are associated with HARP syndrome and pantothenate kinase-associated neurodegeneration (PKAN), formerly Hallervorden-Spatz syndrome. Alternative splicing, involving the use of alternate first exons, 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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**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).