

## Product datasheet for **TF320493**

### PKR (EIF2AK2) Human shRNA Plasmid Kit (Locus ID 5610)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	PKR (EIF2AK2) Human shRNA Plasmid Kit (Locus ID 5610)
Locus ID:	5610
Synonyms:	EIF2AK1; LEUDEN; PKR; PPP1R83; PRKR
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	EIF2AK2 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 5610). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	<a href="#">NM_001135651</a> , <a href="#">NM_001135652</a> , <a href="#">NM_002759</a> , <a href="#">NM_002759.1</a> , <a href="#">NM_002759.2</a> , <a href="#">NM_002759.3</a> , <a href="#">NM_001135651.1</a> , <a href="#">NM_001135651.2</a> , <a href="#">NM_001135652.1</a> , <a href="#">NM_001135652.2</a> , <a href="#">BC093676</a> , <a href="#">BC093676.1</a> , <a href="#">BC007769</a> , <a href="#">BC022314</a> , <a href="#">BC040851</a> , <a href="#">BC057805</a> , <a href="#">BC101475</a> , <a href="#">BC143228</a> , <a href="#">BC143230</a> , <a href="#">BM473760</a> , <a href="#">NM_001135651.3</a>
UniProt ID:	<a href="#">P19525</a>
Summary:	The protein encoded by this gene is a serine/threonine protein kinase that is activated by autophosphorylation after binding to dsRNA. The activated form of the encoded protein can phosphorylate translation initiation factor EIF2S1, which in turn inhibits protein synthesis. This protein is also activated by manganese ions and heparin. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).