

## Product datasheet for **TF320643**

### **CAMKK2 Human shRNA Plasmid Kit (Locus ID 10645)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	CAMKK2 Human shRNA Plasmid Kit (Locus ID 10645)
<b>Locus ID:</b>	10645
<b>Synonyms:</b>	CAMKK; CAMKKB
<b>Vector:</b>	pRFP-C-RS (TR30014)
<b>E. coli Selection:</b>	Chloramphenicol (34 ug/ml)
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	CAMKK2 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 10645). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
<b>RefSeq:</b>	<a href="#">NM_001270485</a> , <a href="#">NM_001270486</a> , <a href="#">NM_006549</a> , <a href="#">NM_153499</a> , <a href="#">NM_153500</a> , <a href="#">NM_172214</a> , <a href="#">NM_172215</a> , <a href="#">NM_172216</a> , <a href="#">NM_172226</a> , <a href="#">NM_172226.1</a> , <a href="#">NM_172226.2</a> , <a href="#">NM_153500.1</a> , <a href="#">NM_172214.1</a> , <a href="#">NM_172214.2</a> , <a href="#">NM_153499.2</a> , <a href="#">NM_172215.1</a> , <a href="#">NM_172215.2</a> , <a href="#">NM_172216.1</a> , <a href="#">NM_006549.1</a> , <a href="#">NM_006549.2</a> , <a href="#">NM_006549.3</a> , <a href="#">NM_001270486.1</a> , <a href="#">NM_001270485.1</a> , <a href="#">BC026060</a> , <a href="#">BC026060.2</a> , <a href="#">BC000318</a> , <a href="#">NM_001270485.2</a> , <a href="#">NM_172215.3</a> , <a href="#">NM_172214.3</a>
<b>UniProt ID:</b>	<a href="#">Q96RR4</a>
<b>Summary:</b>	The product of this gene belongs to the Serine/Threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. The major isoform of this gene plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade by phosphorylating the downstream kinases CaMK1 and CaMK4. Protein products of this gene also phosphorylate AMP-activated protein kinase (AMPK). This gene has its strongest expression in the brain and influences signalling cascades involved with learning and memory, neuronal differentiation and migration, neurite outgrowth, and synapse formation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. The identified isoforms differ in their ability to undergo autophosphorylation and to phosphorylate downstream kinases. [provided by RefSeq, Jul 2012]



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<b>shRNA Design:</b>	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> .
<b>Performance Guaranteed:</b>	<p>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.</p> <p>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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).</p>