

Product datasheet for **TR304763**

ENSA Human shRNA Plasmid Kit (Locus ID 2029)

Product data:

Product Type:	shRNA Plasmids
Product Name:	ENSA Human shRNA Plasmid Kit (Locus ID 2029)
Locus ID:	2029
Synonyms:	ARPP-19e
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ENSA - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2029). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM_004436</u> , <u>NM_207042</u> , <u>NM_207043</u> , <u>NM_207044</u> , <u>NM_207045</u> , <u>NM_207046</u> , <u>NM_207047</u> , <u>NM_207168</u> , <u>NM_004436.1</u> , <u>NM_004436.2</u> , <u>NM_207168.1</u> , <u>NM_207044.1</u> , <u>NM_207043.1</u> , <u>NM_207047.1</u> , <u>NM_207042.1</u> , <u>NM_207045.1</u> , <u>NM_207046.1</u> , <u>BC004461</u> , <u>BC004461.1</u> , <u>BC069208</u> , <u>BC069208.1</u> , <u>BC068544</u> , <u>BC068544.1</u> , <u>BC000436</u> , <u>BM771663</u> , <u>BM984677</u> , <u>BM993811</u> , <u>NM_004436.4</u> , <u>NM_207046.2</u> , <u>NM_207045.2</u> , <u>NM_207042.2</u>
UniProt ID:	<u>O43768</u>
Summary:	The protein encoded by this gene belongs to a highly conserved cAMP-regulated phosphoprotein (ARPP) family. This protein was identified as an endogenous ligand for the sulfonylurea receptor, ABCC8/SUR1. ABCC8 is the regulatory subunit of the ATP-sensitive potassium (KATP) channel, which is located on the plasma membrane of pancreatic beta cells and plays a key role in the control of insulin release from pancreatic beta cells. This protein is thought to be an endogenous regulator of KATP channels. In vitro studies have demonstrated that this protein modulates insulin secretion through the interaction with KATP channel, and this gene has been proposed as a candidate gene for type 2 diabetes. At least eight alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]



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- 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](#).
- 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).