

Product datasheet for **TR510699**

Jph2 Mouse shRNA Plasmid (Locus ID 59091)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Jph2 Mouse shRNA Plasmid (Locus ID 59091)
Locus ID:	59091
Synonyms:	1110002E14Rik; JP-2; Jp2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Jph2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 59091). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC022635 , NM_001205076 , NM_021566 , NM_021566.1 , NM_021566.2 , NM_001205076.1 , NM_197984
UniProt ID:	Q9ET78
Summary:	Junctophilin-2: Membrane-binding protein that provides a structural bridge between the plasma membrane and the sarcoplasmic reticulum and is required for normal excitation-contraction coupling in cardiomyocytes (PubMed:10949023, PubMed:19095005, PubMed:21339484). Provides a structural foundation for functional cross-talk between the cell surface and intracellular Ca(2+) release channels by maintaining the 12-15 nm gap between the sarcolemma and the sarcoplasmic reticulum membranes in the cardiac dyads (PubMed:10949023, PubMed:19095005, PubMed:21339484). Necessary for proper intracellular Ca(2+) signaling in cardiac myocytes via its involvement in ryanodine receptor-mediated calcium ion release (PubMed:10949023, PubMed:19095005, PubMed:21339484). Contributes to the construction of skeletal muscle triad junctions (PubMed:10949023). [UniProtKB/Swiss-Prot Function]
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).