

## Product datasheet for **TR502974**

### Nphp1 Mouse shRNA Plasmid (Locus ID 53885)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Nphp1 Mouse shRNA Plasmid (Locus ID 53885)
Locus ID:	53885
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Nphp1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 53885). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC118953</a> , <a href="#">NM_001291012</a> , <a href="#">NM_001291013</a> , <a href="#">NM_016902</a> , <a href="#">NM_001355429</a> , <a href="#">NM_016902.1</a> , <a href="#">NM_016902.2</a> , <a href="#">NM_016902.3</a> , <a href="#">NM_016902.4</a> , <a href="#">NM_001291013.1</a> , <a href="#">NM_001291012.1</a> , <a href="#">NM_001369236</a>
UniProt ID:	<a href="#">Q9QY53</a>
Summary:	Together with BCAR1 it may play a role in the control of epithelial cell polarity. Involved in the organization of apical junctions in kidney cells, together with NPHP4 and RPGRIP1L/NPHP8 (PubMed:21565611). Does not seem to be strictly required for ciliogenesis (PubMed:19208653). Seems to help to recruit PTK2B/PYK2 to cell matrix adhesions, thereby initiating phosphorylation of PTK2B/PYK2 and PTK2B/PYK2-dependent signaling (PubMed:11493697). May play a role in the regulation of intraflagellar transport (IFT) during cilia assembly (PubMed:19208653). Required for normal retina development (PubMed:19208653). In connecting photoreceptor cilia influences the movement of some IFT proteins such as IFT88 and WDR19 (PubMed:19208653). Involved in spermatogenesis; required for the differentiation of early elongating spermatids into spermatozoa (PubMed:18684731).[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 <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).