

## Product datasheet for **TR514907**

### **Pkhd1 Mouse shRNA Plasmid (Locus ID 241035)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	Pkhd1 Mouse shRNA Plasmid (Locus ID 241035)
<b>Locus ID:</b>	241035
<b>Synonyms:</b>	AI118496; AI182499; FPC; Tigm1
<b>Vector:</b>	pRS (TR20003)
<b>E. coli Selection:</b>	Ampicillin
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	Pkhd1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 241035). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
<b>RefSeq:</b>	<a href="#">NM_153179</a>
<b>Summary:</b>	Promotes ciliogenesis in renal epithelial cells and therefore participates in the tubules formation and/or ensures the maintenance of the architecture of the lumen of the kidney (PubMed:18235088, PubMed:20875407). Has an impact on cellular symmetry by ensuring correct bipolar cell division through the regulation of centrosome duplication and mitotic spindle assembly and by maintaining oriented cell division (OCD) during tubular elongation through planar cell polarity (PCP) pathway (PubMed:19959710). During epithelial cell morphogenesis regulates also cell-cell and cell-matrix adhesion and participates in cell motility (By similarity). Promotes cell-cell contact through the positive regulation of PTK2 kinase activity leading to either positive regulation of epithelial cell proliferation through the HRAS/RAF1 pathways, or negative regulation of apoptosis through the PDK1/AKT1 pathway (PubMed:20875407). May act in collecting-duct and biliary differentiation (By similarity). May participate in the regulation of the cholangiocytes proliferation and the CCN2 production in an CXCL8-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]
<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> .



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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).