

## OriGene Technologies, Inc.

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## Product datasheet for TL311122

## Nephronophthisis (NPHP1) Human shRNA Plasmid Kit (Locus ID 4867)

## **Product data:**

| Product Type:                | shRNA Plasmids  |
|------------------------------|---|
| Product Name:                | Nephronophthisis (NPHP1) Human shRNA Plasmid Kit (Locus ID 4867)  |
| Locus ID:                    | 4867  |
| Synonyms:                    | JBTS4; NPH1; SLSN1  |
| Vector:                      | pGFP-C-shLenti (TR30023)  |
| E. coli Selection:           | Chloramphenicol (34 ug/ml)  |
| Mammalian Cell<br>Selection: | Puromycin   |
| Format:                      | Lentiviral plasmids   |
| Components:                  | NPHP1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 4867).<br>5μg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.   |
| RefSeq:                      | <u>NM 000272, NM 001128178, NM 001128179, NM 207181, NM 000272.2, NM 000272.3, NM 207181.1, NM 207181.2, NM 001128179.1, NM 001128178.1, BC009789, BC032939, BC062574, NM 001128179.3, NM 001128178.3, NM 000272.5, NM 207181.4</u>   |
| UniProt ID:                  | <u>O15259</u>   |
| Summary:                     | This gene encodes a protein with src homology domain 3 (SH3) patterns. This protein interacts with Crk-associated substrate, and it appears to function in the control of cell division, as well as in cell-cell and cell-matrix adhesion signaling, likely as part of a multifunctional complex localized in actin- and microtubule-based structures. Mutations in this gene cause familial juvenile nephronophthisis type 1, a kidney disorder involving both tubules and glomeruli. Defects in this gene are also associated with Senior-Loken syndrome type 1, also referred to as juvenile nephronophthisis with Leber amaurosis, which is characterized by kidney and eye disease, and with Joubert syndrome type 4, which is characterized by cerebellar ataxia, oculomotor apraxia, psychomotor delay and neonatal breathing abnormalities, sometimes including retinal dystrophy and renal disease. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] |



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|                            | Nephronophthisis (NPHP1) Human shRNA Plasmid Kit (Locus ID 4867) – TL311122  |
|----------------------------|--|
| 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 <u>techsupport@origene.com</u> .<br>If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .   |
| Performance<br>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<br>(90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with<br>newly designed constructs, please contact Technical Services at techsupport@origene.com.<br>Please provide your data indicating the transfection efficiency and measurement of gene<br>expression knockdown compared to the scrambled shRNA control (Western Blot data<br>preferred).   |

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