

Product datasheet for TL508026

OriGene Technologies, Inc.

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Nphp4 Mouse shRNA Plasmid (Locus ID 260305)

Product data:

Product Type: shRNA Plasmids

Product Name: Nphp4 Mouse shRNA Plasmid (Locus ID 260305)

Locus ID: 260305

 Synonyms:
 4930564O18Rik; nmf192

 Vector:
 pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Nphp4 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 260305).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 153424, NM 001355738, NM 001355739, NM 153424.1, NM 153424.2, BC138370,

BC044732

UniProt ID: P59240

Summary: Involved in the organization of apical junctions; the function is proposed to implicate a

NPHP1-4-8 module. Does not seem to be strictly required for ciliogenesis (By similarity). Required for building functional cilia. Involved in the organization of the subapical actin network in multiciliated epithelial cells. Seems to recruit INT to basal bodies of motile cilia which subsequently interacts with actin-modifying proteins such as DAAM1 (By similarity). In cooperation with INVS may downregulate the canonical Wnt pathway and promote the Wnt-PCP pathway by regulating expression and subcellular location of disheveled proteins. Stabilizes protein levels of JADE1 and promotes its translocation to the nucleus leading to cooperative inhibition of canonical Wnt signaling (By similarity). Acts as negative regulator of

the hippo pathway by association with LATS1 and modifying LATS1-dependent

phosphorylation and localization of WWTR1/TAZ (By similarity).[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





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).