

## Product datasheet for **MC224441**

### **Nphp4 (NM\_153424) Mouse Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nphp4 (NM_153424) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Nphp4
Synonyms:	4930564O18Rik; nmf192
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_153424, the custom clone sequence may differ by one or more nucleotides

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ATGGGTGACTGGCACAGAGCCTTCAACCCAGAACACACTGGTCCCTCCCCACCCACAGAGAGCGAGGCAGC
TTGGGAAGGAGTCCACGGCATTCCAGTGCATCCTGAAGTGGCTTGACGGGCCACTCATTAAAGCAGGGAAT
CCTAGACATGCTGTCGGAGCTTGAATGCCATCTGCGAGTGACCCTCTTCGATGTCACCTACAAAATTTTC
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TCAATGAGCCCTTGACTTCCACACGACCTTGAGCCACCCAGCATCGTGGCTGTGGTAGAAGTGGTCAC
CGAAGGCAGGAAGAGGGACGGCACCCCTGCAGTGTCTGCTGTGGGTTTGAATTCTTCGCATCTTTGGC
AATAAGCCAGAATCTCCACCTCTGCAGCCAGGACAAACGGTTGAGGCTGTATCATGGCACCCCAAGAG
CCCTCCTGCACCCACTTCTCCAGGATCCCATAGAACAGAAACAAGTTCATGAGGCTGATGGAGAATTGTAG
CCTGCAGTACACCCTGAAGCCACACCCACCCCTGGAGCCCGCCTTCCACCTGCTCCCTGAGAACCTCCTG
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CTCGCTCCAGAAAGCCACCACATGGCACTTAGATGACCTTCTTCCACCTGTACCCTTCCCTGGAGAA
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CTCGAGGTCTGGAGCGGCCTGCACGTCTGCGTCCACAACGGGCTGGGCTTCGTGCAGAGGCCACAGG
TGGTTGTGCTTGTGCCTGAGATGGACGTGGCCTTGACCCGCTCGCCAGCTTTCAGCAGGAAAATCAGTGC
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TCCAGTTCAGTTCTCACTGAGCTCAGACGGCCACAGAGCATGCCAACGGCCCGAGGTGGGGCGTGC
GTCCTCCCGAAGATGCCGGCATCCCTTCAGGCACCCAGCACCAGCTGCCCGGATCTTGTCTCAACA
CAGGACTCTCCTGTGGGCCAGGGCTCTCGCTCTCCAGCTGACGGCTTCCCGCTGTCCCGGCTCTGC
AAAGCTTCCAAGCCCTTTCAGCCCCGGACAGCTCTCAGTCCCCAGAGGGTCCCCAGCTCCAGGC

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CGAATCTGTATTAGAGAGCAGGGTCTCTCACCTGGAAGCCGACCTGAGCCAGCCGGCCTCGCTCCAGGGA  
 ACGCCTGCTGTCGAGCATCTACAGGAACCTCCCTTCACTCCTCTGCATGCCCCCATCGTCGTGGGAGCAC  
 AGACCAGGAGCTCTAGAAGCCAGCTCTCCAGAGCTGCGATGGTGTCTCTGCAGTCTTCTGGCTTCCCCGA  
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 TACTGCGACCCCGGAGACTGCCACATCCCCCTTAAGTTCAGAGCTTCTCCGTGGGCCCTCTTGCTC  
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 AGAGATGTGTTCCCTAAGGTGGCCAGTGGTCCAAGCCGGAGATCAAAGACTTCTTTGTCGTCATCTATG  
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 AGAGCTTTACCTCCCACCCCAGGAGCTGAAGACAGACCCTGCCGGTGTCTTTGTGTTGCCACCTCATG  
 GGTACAGGACCTGCATGTGGGTGTGAGGCCAAGGAGGGCTGGCAGCCGCTTTGTCCATCTCAACCTAGT  
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 AAGGCCTTCGAGATCACCATGGCAGCAGGGGATGAGAAGGGCACCAACAAGCGCATCACCTACACCAACC  
 CCTATCCTTTCGGAGGACCTACCGCTGCACAGTACCCTCCGAGCTGTTGCGCTTCAAGGAGGACTC  
 CTTCCAGGTGGCGGGAGGAGAGACCTACACCATCGGCCTCGGTTCTGCCAAGTGGCAGCGCCGGGAG  
 GAGGAGATCCTGATCTACATCAATGACCACGAGGACAAGAATGAGGAGACATTCTGTGTGAAGTCTCT  
 ACCAGTGA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_153424  
**Insert Size:** 4278 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [BC138370](#), [AAI38371](#)

**RefSeq Size:** 4441 bp

**RefSeq ORF:** 4278 bp

**Locus ID:** 260305

**UniProt ID:** [P59240](#)

**Cytogenetics:** 4 E2

**Gene 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]

Transcript Variant: This variant (1) represents the longest transcript. Variants 1-3 encode the same protein.