

Product datasheet for **RC226024**

Nephronophthisis (NPH1) (NM_001128179) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Nephronophthisis
Synonyms:	JBTS4; NPH1; SLSN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >RC226024 representing NM_001128179
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCTGGCGAGACGACGAGATCCTCTCCAGGCCCTGCGGCGCCGAATCAGGAGCTGAAGCAACAGG
 TTGATAGTTTGCTTCTGAGAGCCAACTGAAAGAAGCTCTAGAACCCAATAAAGACAACATATTTATCA
 AAGAGTTGGGACCTACTGAAGAAGAGGAAGAAAGTGAAGTGAAGATAGTGAAGACAGTGGTGGGAG
 GAAGAAGATGCAGAGGAGGAAGAGGAAGAGAAAGAGGAAAAATGAATCTCACAATGGTCAACCGGTGAAG
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 CCTTGTAAATTGAAAAAACCTGATGGTTGGTGGATAGCTAAGGATGCCAAAGGAAATGAAGGTCTTGTT
 CCCAGAACCTACCTAGAGCCTTATAGTGAAGAAGAAGAGGCAAGAGTCAAGTGAAGAGGCGAGTGAAG
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 TGCTGTTCAGAAAGCGATTTAGAGATAAACACTGTTGATGTGTTAACTACGATGGGAGCTATTCTGCA
 GGGTTGAGGCTTCCACGCTCTCACAGCTTCTGGAGGAAGGGAATCAATTCGAGCAAATTACTTCTTAC
 AACCAGAGCTCATGCCCTCACAACTGGCCTTCAGAGATCTGATGTGGGATGCTACAGAAGGCACTATTAG
 GTCGAGACCAAGTCGATTTTATTGATTCTGACATTATGGAGCTGTAAGTATGTTCTCTCCAGGAATG
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 TTCTTAACTTTTGTATGCCAGTGGAGTTCTATTCAGCAAAAATTATGAGCTTTTCTTGAATGGTGG
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 CAGATTATGACAATGAGAAGGAGCCTCAACTTCTAGTGAACTGAGATCCTTGAACAGAAGATCAAGAA
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 ATGCTGGCCACCTTCCCATGCTCTTGGAGCAGCCTGATGTGATGGATGCTCTCAGGAGTTCTGTGGGCTG
 GAAAAGAAAGCACATTAAGATCAGAGAAGAGAGACAAAGAGTTCTGAAAGTCCACGTTTCTCTGCTGT
 TTACCATGACTGCGTGCTCCCACTTCTCCACTCCACACGCCTACCCCATTCAGGTGGGAGAGAAGAG
 ACTGAGACTGCACGGTGAAGGTTATCACTGACTTCTTAAGCAAAACCAAGAAACCAGGGCGCCCTCC
 AAGCTCTGCTGTACCAGACGAGTTCATGAACCTTTTGACCTTTTACAGCAGACCTATGACTTCTTGG
 TGAATGAGAAAGAATGCAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226024 representing NM_001128179
 Red=Cloning site Green=Tags(s)

MLARRQDPLQALRRRNQELKQQVDSLLSESQLKEALEPNKRQHIYQRVGAPTEEEEESESEDSGGE
 EEDAEEEEKEENESHKWTGEEYIAVGDFTAQQVGDLTFFKGEILLVIEKKPDGWWIAKDAKNEGLV
 PRTYLEPYSEEEGQESSEEGSEEDVEAVDETADGAEVKQRTDPHWSAVQKAISEINTVDVLTMTGAIPA
 GFRPSTLSQLLEGNQFRANYFLQPELMPSQLAFRDLMDATEGTIRSRPSRISLILTLWSCKMIPLPGM
 SIQVLSRHVRLCLFDGNKVLNIIHTVRATWQPKPKTWTFSPQVTRILPCLLDGDCFIRSNSASPDGLIL
 FELGISYIRNSTGERGELSCGWVFLKLFASGVPIPAKTYELFLNGGTPYEKGIEVDPSISRRAHGSVFY
 QIMTMRRQPQLVKLRSLNRRSRNLSLLPETLIGNMCSIHLIFYRQILGDVLLKDRMSLQSTDLSHP
 MLATFPMLLEQPDVMDALRSSWAGKESTLKRSEKRDKEFLKSTFLLVYHDCVLPLLHSTRLPFFRWAE
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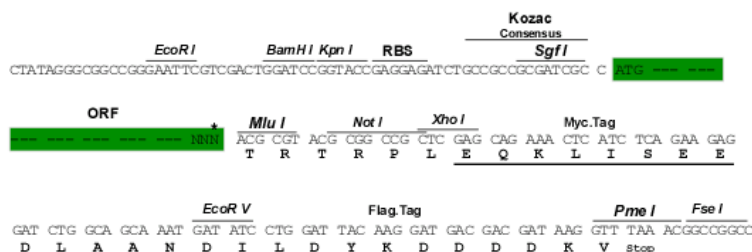
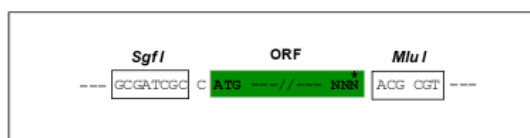
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1411_e06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001128179

ORF Size: 1842 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

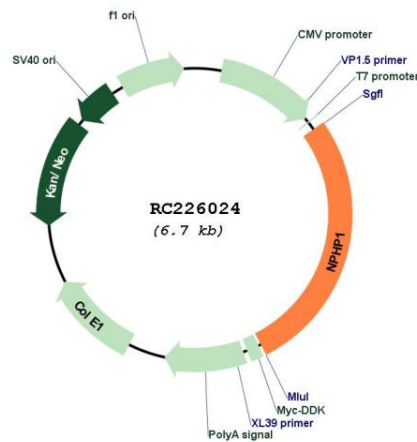
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: [NM_001128179.3](#)

RefSeq ORF: 1845 bp

Locus ID:	4867
UniProt ID:	O15259
Cytogenetics:	2q13
Protein Families:	Druggable Genome
MW:	69.7 kDa
Gene 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]

Product images:



Circular map for RC226024

Western validation with an anti-DDK antibody
 * L: Control HEK293 lysate R: Over-expression lysate