

Product datasheet for **SC304230**

Nephrocystin 4 (NPHP4) (NM_015102) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nephrocystin 4 (NPHP4) (NM_015102) Human Untagged Clone
Tag:	Tag Free
Symbol:	NPHP4
Synonyms:	POC10; SLSN4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC304230 representing NM_015102. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAACGACTGGCACAGGATCTTCACCCAAAACGTGCTTGTCCCTCCCCACCCACAGAGAGCGCGCCAG
CCTTGGAAAGGAATCCACGGCATTCCAGTGTCTCAAGTGGCTGGACGGACCGTAATTAGGCAGGGC
GTGCTGGAGGTACTGTGAGAGTTGAATGCCATCTGCGAGTGTCTTTCTTTGATGTCACCTACCGGCAC
TTCTTTGGGAGGACGTGGAAAACCACAGTGAAGCCGACGAAGAGACCGCCGTCCAGGATCGTCTTTAAT
GAGCCCTGTATTTTACACATCCCTAAACCACCCTCATATCGTGGCTGTGGTGAAGTGGTCGCTGAG
GGCAAGAAACGGGATGGGAGCCTCCAGACATTGTCTGTGGGTTTGAATTCTTCGGATCTTCAGCAAC
CAGCCGGACTCTCCTATCTCTGCTTCCCAGGACAAAAGGTTGCGGCTGTACCATGGACCCCCAGAGCC
CTCCTGCACCCGCTTCTCCAGGACCCCGCAGAGCAAAACAGACACATGACCCTCATTGAGAACTGCAGC
CTGCAGTACACGCTGAAGCCACACCCGGCCCTGGAGCCTGCGTTCACCTTCTTCTGAGAACCTTCTG
GTGTCTGGTCTGCAGCAGATACCTGGCCTGCTTCCAGCTCATGGAGAATCCGGCGACGCTCTCCGAAAG
CCTCGCTCCAGAAGCCATCACGGGCACTTGGATGACTTATTCTTACCCTGTACCCCTCCCTGGAG
AAGTTTGAGGAAGAGCTGCTGGAGCTCCACGTCCAGGACCACTCCAGGAGGGATGTGGCCCACTGGAC
GGTGGTGCCCTGGAGATCCTGGAGCGCGCCTGCGTGTGGCGTGCAATGGTCTGGGCTTCGTGCAG
AGGCCGAGGTGTTGTACTGGTGCCTGAGATGGATGTGGCTTGACGCGCTCAGTAGCTCAGCAGG
AAAGTGGTCTCCTCTTCCAAGACCAGCTCCGGGAGCCAAGCTCTGGTTTTGAGAAGCCGCTCCGCCTC
CCAGAGATGGTCCGCCACCCTGCATTTGCGGTATCTTCCAGCTGGAGTACGTGTTCCAGCAGCCCTGCA
GGAGTGGACGGCAATGCAGCTTCGGTACCTCTCTGTCCAACCTGGCATGCATGCACATGGTCCGCTGG
GCTGTTTGAACCCCTTGTGGAAGCTGATTCTGGAAGGGTGACCCTGCCTCTGCAGGGTGGGATCCAG
CCCAACCCCTCGCACTGTCTGGTCTACAAGGTACCCTCAGCCAGCATGAGCTCTGAAGAGGTGAAGCAG
GTGGAGTCCGGTACACTCCGGTTCAGTCTCGTGGGCTCAGAAGAACACCTGGATGCACCCACGGAG
CCTGTGAGTGGCCCAAAGTGGAGCGCGCCCTCCAGGAAACCACCCACGTCCCTTCGAGCCGCCA
GCGCCAGTACCTCGATTCTCGTGCCTCCGACGAACTCACCTGTGGGACCAGGGTTGCAATTTCCAG
```



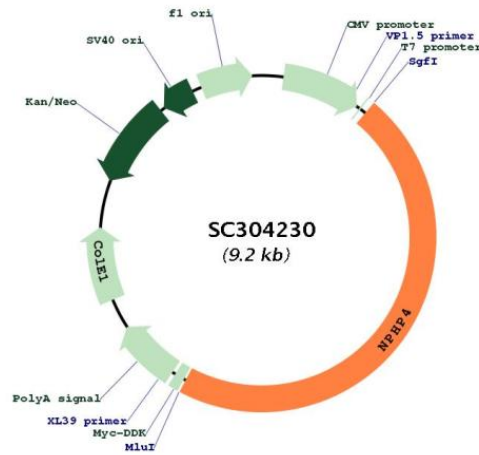
[View online >](#)

CTGGCGCCTCCCCGCGTCCCCGACTCAGCACTGCTTGCCAGGCCTACTTCACAGCTACCCCATGGC
TCTCAGGCCTCCCCGGCCAGGCACAGGAGTTCCCGTTGGAGGCCGATCTCCCACCTGGAAGCCGAC
CTGAGCCAGACCTCCCTGGTCTTGAAACATCCATTGCCGAACAGTTACAGGAGCTGCCGTTACGCCT
TTGCATGCCCCATTGTTGTGGGAACCCAGACCAGGAGCTCTGCAGGGCAGCCCTCGAGAGCCTCCATG
GTGCTCCTGCAGTCTCCGGCTTCCCGAGATTCTGGATGCCAATAAACAGCCAGCCGAGGCTGTGAGC
GCTACAGAACCTGTGACGTTTAAACCCTCAGAAGGAAGAATCAGATTGTCTACAAAGCAACGAGATGGTG
CTACAGTTTCTTGCTTTAGCAGAGTGGCCAGGACTGCCGAGGAACATCATGGCCAAAGACTGTGTAT
TTCACCTTCCAGTCTACCGCTTCCACCCGCAACGACGCCACGACTGCAGCTGGTCCAGCTGGATGAG
GCCGGCCAGCCAGCTCTGGCGCCTGACCCACATCCTCGTGCCTGTGAGCAGAGATGGCACCTTTGAT
GCTGGGTCTCCTGGCTTCCAGCTGAGGTACATGGTGGGCCCTGGGTTCTGAAGCCAGGTGAGCGGCGC
TGCTTTGCCCGCTACCTGGCCGTGCAGACCCTGCAGATTGACGTCTGGGACGGAGACTCCCTGCTGCTC
ATCGGATCTGCTGCCGTCCAGATGAAGCATCTCCTCCGCAAGGCCGGCCGGCTGTGCAGGCCTCCCAC
GAGCTTGAGGTCGTGGCAACTGAATACGAGCAGGACAACATGGTGGTGTGAGTGAGACATGCTGGGTTT
GGCCGCGTCAAGCCCATCGCGTCCACTCGGTGGTGAAGGGCCGGCTGCACCTGACTTTGCCAACGTG
GGTCACCCGTGTGAACAGAAAGTGAAGGTTGTAGCACATTGCCACCGTCCAGATCTCGGTCATCTCA
AACGATGGAGCCAGCCGCTTCTCTGGAGGCAGCCTCCTCAGACTGGAAGCTCAAGGCCAAAACAGGTG
GTGCAAGCACAGAAGCTGGCGGACGTGGACAGTGAAGTGGCTGCCATGCTACTGACCCATGCCCGGAG
GGCAAGGGGGCCCCAGGACGTGAGCCGCGAGTGGATGCCACCCGAGGCGTAAGCTGGAGCGGATGAGG
TCTGTGCGCTGCAGGAGGCCGGGGGAGACTTGGGCCGGCGGGGACGAGCGTGTGGCGCAGCAGAGC
GTCCGCACACAGCACTTGGCGGACTACAGGTCTCGCCGCTACCGGAAACGCACGAAGGCCGAGAGC
ATCGCCAGCCTGCTGAGCCTGGCCATCACCACGGAGCACACGCTCCACGCCACGCTGGGGTTCGCCGAG
TTCTTTGAGTTTGTGCTTAAGAACCCCCACAACACACAGCACAGGCTGACTGTGGAGATCGACAACCCC
GAGCTCAGCGTCATCGTGGACAGTCAAGGAGTGGAGGACTTCAAGGGTGTGCTGGCTGCACACACCCG
GTGGAGGAGGACATGTTCCACCTGCGTGGCAGCCTGGCCCCAGCTCTACCTGCCCCCCACGAGACC
GCCACGTCGCCCTCAAGTTCAGAGCTTCTCTGAGGGCAGCTGGCCATGGTGCAGGCCTCCTGGG
TTGAGCAACGAGAAGGGCATGGACGCCGTGCACCTTGAAGTCCAGCGCAGTGGCCACTAAACACGCC
AAGGTCTGTCCGAGCGAGTGGTGGCAAGCCATCGCCGTGCTCTGCCTGACTGTGGAGCTGCAGCCC
CACGTGGTGGACCAGGTCTCCGCTTCTATCACCAGGAGCTCTCCTTCTGAAGAAGGCCATCCGCTG
CCGCCCTGGCACACATTTCCAGGTGCTCCGGTGGGAATGCTTGGTGAAGACCCCCAGTCCATGTTCCG
TGCAGCGACCCGAACGTATCTGTGAGACCCAGAATGTGGCCCCGGGAACACGGGACATATTTCTG
AAGGTGGCCAGTGGTCCAAGCCCGAGATCAAAGACTTCTTTGTATCATTTACTCGGATCGCTGGCTG
GCGACACCCACACAGACGTGGCAGGTCTACCTCCACTCCCTGCAGCGCTGGATGTCTCCTGCGTGC
GGCCAGCTGACCCGCTGTCCCTTGTCTTCCGGGGACACAGACAGTGAAGAAAGTGAAGCTTTACC
TCTCATCCCAGGAGCTGAAGACAGACCCAAAGGTGTCTTCTGTGCTGCCGCTCGTGGGTGACAGGAC
CTGCATGTTGGCTGAGGCCCTTAGGGCCGGCAGCCGCTTTGTCCATCTCAACCTGGTGGACGTGGAT
TGCCACCAGCTGGTGGCCTCCTGGCTCGTGTGCCTCTGCTGCCGCCAGCCGCTCATCTCAAGGCCTTT
GAGATCATGTTGGCTGCGGGCGAAGGGAAGGTGTCAACAAGAGGATCACCTACCAACCCCTACCCC
TCCGGGAGGACATTCCACTGCACAGCGACCCCGAGCTGCTGCGGTTCAAGAGGACTCCTTCCAG
GTCGGGGGTGGAGAGACCTACACCATCGGCTTGCAGTTTGCCTAGTCAAGAGTGGGTGAGGAGGAG
ATCCTGATCTACATCAATGACCATGAGGACAAAACGAAGAGGCATTTTGCCTGAAGGTCTCTACCCAG
TGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:

SgfI-MluI

Plasmid Map:



ACCN: NM_015102

Insert Size: 4281 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: [NM_015102.4](#)

RefSeq Size: 5020 bp

RefSeq ORF: 4281 bp

Locus ID: 261734

UniProt ID: [O75161](#)

Cytogenetics: 1p36.31

MW: 157.6 kDa

Gene Summary: This gene encodes a protein involved in renal tubular development and function. This protein interacts with nephrocystin, and belongs to a multifunctional complex that is localized to actin- and microtubule-based structures. Mutations in this gene are associated with nephronophthisis type 4, a renal disease, and with Senior-Loken syndrome type 4, a combination of nephronophthisis and retinitis pigmentosa. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]
Transcript Variant: This variant (1) encodes the longest isoform (a).