

Product datasheet for **SC323155**

Nephronophthisis (NPH1) (NM_001128179) Human Untagged Clone

Product data:

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



Fully Sequenced ORF:

>SC323155 representing NM_001128179.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTGGCGAGACGACGAGATCCTCTCCAGGCCCTGCGGCCCGCAATCAGGAGCTGAAGCAACAG
GTTGATAGTTTGTCTTCTGAGAGCCAACTGAAAGAAGCTCTAGAACCAATAAAGACAACATATTTAT
CAAAGAGTTGGGGCACCTACTGAAGAAGAGGAAGAAAGTGAAAGTGAAAGATAGTGAAGACAGTGGTGGG
GAGGAAGAAGATGCAGAGGAGGAAGAGGAAGAAAGAGGAAATGAATCTCACAATGGTCAACCGGT
GAAGAATACATCGCTGTTGGAGATTTACTGCTCAGCAAGTTGGAGATCTTACATTTAAGAAAGGGGAA
ATTCTCCTTGTAATTGAAAAAACCTGATGGTTGGTGGATAGCTAAGGATGCCAAAGGAATGAAGGT
CTTGTTCCCAAGAACTACCTAGAGCCTTATAGTGAAGAAGAAGAAGGCCAAGAGTCAAGTGAAGAGGGC
AGTGAAGAAGATGTAGAGGCGGTGGATGAAACAGCAGATGGAGCAGAAGTTAAGCAAGAAGTATGATCCC
CACTGGAGTGTCTTCAAGAGCGATTTCAAGATAAACACTGTTGATGTGTTAACTACGATGGGAGCT
ATTCTGCGAGGTTCCAGGCTTCCACGCTCTCACAGCTTCTGGAGGAAGGAATCAATTCGAGCAAAT
TACTTCTTACAACAGAGCTCATGCCCTTCAACTGGCCTTCAGAGATCTGATGTGGGATGCTACAGAA
GGCACTATTAGGTCGAGACCAAGTCGATTTTATTGATTCTGACATTATGGAGCTGTAATGATTCCT
CTTCCAGGAATGAGCATACAGGTTCTCAGCAGACATGTACGCCTCTGTCTATTTGATGGTAATAAGGTT
CTGAGCAACATTCATACAGTCAAGCCACATGGCAACCTAAAAGCCAAAACATGGACCTTTTCTCCC
CAGTTACTCGCATCTTACCATGTTTGTGTTGATGGTATTGCTTTATCAGGTCTAATTCTGCATCTCCA
GATCTTGGAATATTATTGAACTTGGAATTTCTTATATTGCAATTCAACTGGTGAAGAGGAGAGTTA
AGCTGTGGCTGGGTGTTTCTTAACTTTTTGATGCCAGTGGAGTTCCTATTCCAGCAAAAACCTATGAG
CTTTTCTGAATGGTGGTACTCCTTATGAAAAGGTATTGAAGTGGACCTTCAATATCCAGAAGAGCA
CACGGCAGTGTCTTACCAGATTATGACAATGAGAAGGCAGCCTCAACTTCTAGTGAAGTGAAGATCC
TTGAACAGAAGATCAAGAAATGTACTAAGTCTACTGCCAGAAACATTAATTGGAATATGTGTTCTATT
CACTTGTGATATTTATCGCAAAATCTTGGAGATGTGCTCCTGAAAGACAGGATGAGCTTGCAAAGT
ACTGATTTAATTAGCCATCCCAGTGGCCACCTTCCCAGTCTTGGAGCAGCCTGATGTGATGGAT
GCTCTCAGGAGTTGCTGGGCTGGAAGAAGAGCATTAAAAAGATCAGAGAAGAGAGACAAAGAGTTT
CTGAAGTCCACGTTTCTCCTGGTTTACCATGACTGCGTGTCTCCACTTCTCCACTCCACACGCTACCC
CCATTCAAGTGGGAGAGAAGAGAGTGAAGTGCACGGTGGAAAGTTATCACTGACTTCTTAAAGCAA
AACCAAGAAACCAGGGCGCCTCAAGCTCTGCTGTCAACAGACGAGTTCATGAACCTTTTGACCTT
TCAGAGCAGACCTATGACTTCTTGGGTGAATGAGAAAGATGCAGTGTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:

SgfI-MluI

ACCN:

NM_001128179

Insert Size:

1845 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001128179.1</u>
RefSeq Size:	2401 bp
RefSeq ORF:	1845 bp
Locus ID:	4867
UniProt ID:	<u>O15259</u>
Cytogenetics:	2q13
Protein Families:	Druggable Genome
MW:	69.9 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] Transcript Variant: This variant (4) lacks an alternate in-frame segment in the 5' coding region, and uses two alternate in-frame splice sites in the mid-coding region, compared to variant 1, resulting in an isoform (4) that is shorter than isoform 1.