

Product datasheet for **RC211421**

IQ motif containing B1 (IQCB1) (NM_001023570) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IQ motif containing B1 (IQCB1) (NM_001023570) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IQ motif containing B1
Synonyms:	NPHP5; PIQ; SLSN5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC211421 representing NM_001023570
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGCCAACAGGTACAGACCCAAGGATCTTATCTATAGCTGCTGAAGTTGCAAAAAGCCCTGAGCAGA
 ATGTCCCTGTTACTGTTGAAGTTAAAAGAAATAATAACATCACACCTTTAGGAAGCTCAGAGTTGAA
 GAAAATCAAACAAGATATATATTGTTATGATCTCATTCAATATTGCCTCTTGGTCTCAGTCAAGATTAT
 TCTCGAATCCAGGGTGGTTGGACTACAATTTCCAGCTTACACAGATATTAAGCCATTGCTGTGTGGGCT
 TGGAGCCAGGAGAAGATGCAGAGGAATTTACAATGAATTACTTCCATCAGCTGCAGAAAATTTCTAGT
 TTTGGGGAGACAATTACAAACATGTTTTATCAATGCAGCTAAGGCTGAAGAAAAAGATGAATTACTACAC
 TTTTTCCAATTTGACTGATTCTCTCTTGGCTTTTGGGAGGCCATGTTGAATTATTCAGAATGTAC
 TACAAAGTGATCATTCTTACATTTACTGCAAGCTGACAATGTCCAAATAGGATCTGCAGTCATGATGAT
 GCTACAGAATATACTACAGATCAACAGTGGTATTACTCAGAATAGGAAGAAAAGCCCTGTATTCAATT
 TTAGATGAAGTTATTTTCAAGCTTTTTTCAACTCCTAGTCCAGTTATAAGAACTACTGCTACAAAACCTCC
 TACTGTTGATGGCTGAATCCCATCAGGAAATTTGATTTACTGAGACAAAGTACCTGCTACAAAGGACT
 CAGACGCTACTAAGTAAACAGGAACTGGGACTGAATTCAGTCAAGAACTTAGACAGCTTGTGGCCTT
 TTAAGCCCAATGGTCTATCAGGAAGTAGAAGAGCAGAACTACATCAAGCAGCATGCTTGATTCAAGCCT
 ATTTGAAGGGTTTTTCCAGACAAGAAAGAGATTAAGAAGCTTCCATCTGCTGTGATTGCTTTGCAGAGGAG
 TTTCCAGATCCAAACGATCAAAGATGTTGCTGGAGATAAATAGGCAGAAGGAAGAGAGGACCTCAAATTA
 CAATTGCAACTTCAAAGACAGAGAGCCATGAGACTTTCCGAGAATTGCAGCTGAGTATGCTCGAAATAG
 TTCATCCAGGTCAGGTGGAGAAACACTATCGGGAATGGAAGAGAAATCAGCACTGATTATCCAGAAACA
 TTGGAGAGGGTACAGGGAAGGAAAAATTTTCCCAACAGAGGCAGTCTCTCATAGAGTATAAAGCAGCT
 GTCACACTTCAAAGAGCAGCGCTTAAATTCCTAGCGAAGTGCCGTAAGAAAAAGAACTATTTGCTCCTT
 GGCGAGGACTCCAAGAACTCACTGATGCACGCCGAGTTGAACTGAAGAAACGAGTGGATGACTATGTCAG
 AAGACATTTGGGCTCTCAATGTCAGATGTGGTCACTAGGGAGCTCCATGCCAAGCTCAAGAACGACTG
 CAACACTACTTTATGGGCAGGGCCCTAGAAGAGCGAGCCAGCAGCACAGAGAAGCTCTGATAGCACAGA
 TCAGCACCAACGTTGAACAGCTAATGAAGGCACCAAGTCTGAAGGAGGCAGAAGGAAAGAACTGAGCT
 CTTCTAAGTAGATCCAGGCCTGTGGCAGCCAAGGCAAGCAGGCCATCTCACAACTGAAGCACATA
 CAAGCACCTGGTGAAGAAGCTTGGAGAAGAATCTGGAGATGAGATTGATGTTCCAAGGATGAGCTTA
 GTATAGAATTAGAAAATTTATTCATTGGTGAACCAAACCACT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211421 representing NM_001023570
 Red=Cloning site Green=Tags(s)

MKPTGTDPRILSIAAEVAKSPEQNPVILLKLKEIINITPLGSSELKKIKQDIYCYDLIQYCLLVLSQDY
 SRIQGGWTTISQLTQILSHCCVLEPGEDAEEFYNELLPAAENFLVLGRQLQTCFINAAKAEKDELLH
 FFQIVTDSLFWLLGGHVELIQNVLQSDHFLHLLQADNVQIGSAVMMMLQNILQINSGDLLRIGRKALYSI
 LDEVIFKLFSTSPVIRSTATKLLLLMAESHQEILILLRQSTCYKGLRRLSKQETGTEFSQELRQLVGL
 LSPMVYQEVVEEQLHQACL IQAYWKGFTRKRLKKLPSAVIALQRSFRSKRSMMLLEINRQKEEEDLKL
 QLQLQRQRAMRLSRELQLSMLIEIVHPGQVEKHYREMEEKSAIIQKHWRYRERKNFHQRQSLIEYKAA
 VTLQRAALKFLAKCRKKKKLFAPWRGLQELTDARRVELKKRVDDYVRRHLGSPMSDVVSRELHAQAQERL
 QHYFMGRALEREQAQHREALIAQISTNVEQLMKAPSLKEAEGKEPELFLSRSRPVAAKAKQAHLLTLKHI
 QAPWKKLGEESGDEIDVPKDEL SIELENLFIGGTKPP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8025_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001023570

ORF Size: 1794 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.

RefSeq: [NM_001023570.4](#)

RefSeq Size: 2392 bp

RefSeq ORF: 1797 bp

Locus ID: 9657

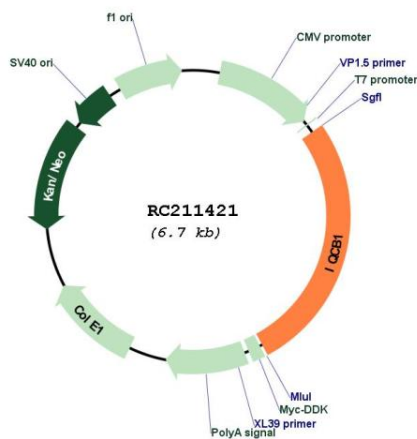
UniProt ID: [Q15051](#)

Cytogenetics: 3q21.1

MW: 68.7 kDa

Gene Summary: This gene encodes a nephrocystin protein that interacts with calmodulin and the retinitis pigmentosa GTPase regulator protein. The encoded protein has a central coiled-coil region and two calmodulin-binding IQ domains. It is localized to the primary cilia of renal epithelial cells and connecting cilia of photoreceptor cells. The protein is thought to play a role in ciliary function. Defects in this gene result in Senior-Loken syndrome type 5. Alternative splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC211421