

Product datasheet for **SC315012**

Polycystin 2 (PKD2) (NM_000297) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Polycystin 2 (PKD2) (NM_000297) Human Untagged Clone
Tag: Tag Free
Symbol: Polycystin 2
Synonyms: APKD2; Pc-2; PC2; PKD4; TRPP2
Mammalian Cell Selection: None
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000297 edited
 GCGCCGGGAAGAAAGGAACATGGCTCCTGAGGCGCACAGCGCCGAGCGCGGCCCGCGCA
 CCCGCGCGCCGGACGCCAGTGACCGCGATGGTGAACCTCCAGTCGCGTGCAGCCTCAGCAG
 CCCGGGGACGCCAAGCGGCCGCCCGCGCCCCGCGCGCCGACCCGGGCGGCTGATGGCT
 GGCTGCGCGGCCCTGGGCGCCAGCCTCGCCGCCCGGGCGGCTCTGCGAGCAGCGGGGC
 CTGGAGATCGAGATGCAGCGCATCCGGCAGGCGGCCGCGCGGGACCCCGCGCGGAGCC
 GCGGCCTCCCCTTCTCCTCCGCTCTCGTCGTGCTCCCGCAGGCGTGGAGCCGCGATAAC
 CCCGGCTTCGAGGCCGAGGAGGAGGAGGAGGTGGAAGGGGAAGAAGCGGAATGGTG
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 AGCTCCGTGGGCGCGGAGCCGGGGCTTGGGGCTACCACGGCGGGCCACCCGAGC
 GGGAGGCGGCGCGGCGAGAGGACCAGGGCCCGCGTGCAGCCAGCCAGTCGGCGCGGG
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 AGGCTGGTTCCGCGGCTGCGAGGTCTCTGGGAAACAAGACTCATGGAGAAAGCAGCACT
 AACCGAGAGAAATACCTAAAAGTGTTCACGGAACTGGTCACATACCTCTTTTCTC
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 ACTCTGTCTTCCATGGAAGACTTCTGGAAGTTCACAGAAGGCTCCTTATTGGATGGGCTG
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 GAGAACCCTGCTGTTAGGGTCCACGAAACGGCAACTCCGAGTCAGAAATGGATCCTGC
 TCTATCCCCAGGACTTGAGAGATGAAATTAAGAGTGCTATGATGTCTACTCTGTCACT
 AGTGAAGATAGGGCTCCCTTTGGCCCCGAAATGGAACCGCTTGATCTACACAAGTGAA
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 AACATTAACCTGTTCTGTGTGGTCAGGTTATTGGTTGAATCCCAGCAACAGGTGGTGTG
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 TTCTGCGCAGCCTGTGAGATTATCTTTGTTTCTTATCTTTACTATGTGGTGAAGAG



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ATATTGGAAATTCGCATTCACAACTACACTATTTCCAGGAGTTTCTGGAATTGTCTGGAT
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ACAGAAGGCATGGAAGGTGCAGGTGGAATGGGAGTTCTAATGTCCACGTATGATATGTG
TGTTTCAGTATGTGTGTTTCTAATAAGTGAAGGAGGAGTGGCTGTCCTGAATTGCTG
    
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- Restriction Sites:** Please inquire
- ACCN:** NM_000297
- Insert Size:** 3000 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 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](#)
- OTI Annotation:** The ORF of this clone has been fully sequenced and found to be a perfect match to NM_000297.2.
- 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).

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| Reconstitution Method: | <ol style="list-style-type: none">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: | <u>NM_000297.2, NP_000288.1</u> |
| RefSeq Size: | 5073 bp |
| RefSeq ORF: | 2907 bp |
| Locus ID: | 5311 |
| UniProt ID: | <u>Q13563</u> |
| Cytogenetics: | 4q22.1 |
| Domains: | ion_trans |
| Protein Families: | Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane |
| Gene Summary: | <p>This gene encodes a member of the polycystin protein family. The encoded protein is a multi-pass membrane protein that functions as a calcium permeable cation channel, and is involved in calcium transport and calcium signaling in renal epithelial cells. This protein interacts with polycystin 1, and they may be partners in a common signaling cascade involved in tubular morphogenesis. Mutations in this gene are associated with autosomal dominant polycystic kidney disease type 2. [provided by RefSeq, Mar 2011]</p> <p>Transcript Variant: This variant (1) represents the longer transcript.</p> |