

## Product datasheet for **RG220948**

### Polycystin 2 (PKD2) (NM\_000297) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Polycystin 2 (PKD2) (NM_000297) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Polycystin 2
Synonyms:	APKD2; Pc-2; PC2; PKD4; TRPP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG220948 representing NM\_000297  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTGAAGTCCAGTTCGCGTGCAGCCTCAGCAGCCGGGGACGCCAAGCGGCCGCCCGCCCGCCCGCGCGC  
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 TCGAGGCCGAGGAGGAGGAGGAGGTGGAAGGGGAAGAAGCGGAATGGTGGTGGAGATGGACGTAGA  
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 TGCAGGTGAAATGGGAGTTCTAATGTCCACGTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG220948 representing NM\_000297  
 Red=Cloning site Green=Tags(s)

```
MVNSSRVQPQQPGDAKRPPAPRAPDPGPLMAGCAAVGASLAAPGGLCEQRGLEIEMQIRQAAARDPPAG
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```

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

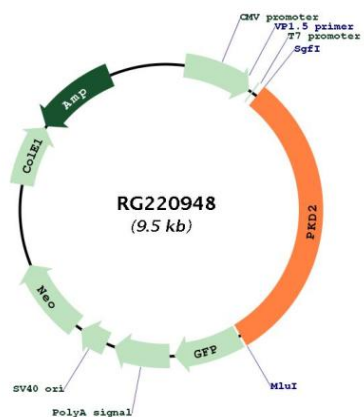


**ACCN:** NM\_000297

**ORF Size:** 2904 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000297.2</a> , <a href="#">NP_000288.1</a>
<b>RefSeq Size:</b>	5073 bp
<b>RefSeq ORF:</b>	2907 bp
<b>Locus ID:</b>	5311
<b>UniProt ID:</b>	<a href="#">Q13563</a>
<b>Cytogenetics:</b>	4q22.1
<b>Domains:</b>	ion_trans
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
<b>Gene Summary:</b>	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]

Product images:



Circular map for RG220948