

## Product datasheet for **MR200180**

### 2900042B11Rik (BC021897) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** 2900042B11Rik (BC021897) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** 2900042B11Rik  
**Synonyms:** 2900042B11Rik; IFT25  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR200180 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAGGAAAGTGGATCTCTGCTCAGTCACTGAAGGGACAGAAGTGATTCTGGCCACATCGAGTGATGAAA  
AGCACCCACCTGAAAACATCATTGATGGTCCTGCTTGGCGAGGACGTAGAGGGAAGTCGATTCTCAGAC  
CTTTCATTCCAAGAAGAGTGGCCAATGGAGAACACACCCTTTTGTATTCTAATTTTTATTTATAT  
GTGGGTTTTGCCTACATGTATGGCTGTGCGGATATGTTTCAGTACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR200180 protein sequence  
Red=Cloning site Green=Tags(s)

MRKVDLCSVTEGTEVILATSSDEKHPPENIIDGPAWRGRRGKSYSQTFHSSKSGQWRTHHFCLFLIFILY  
VGFAYMYGCADMFST

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

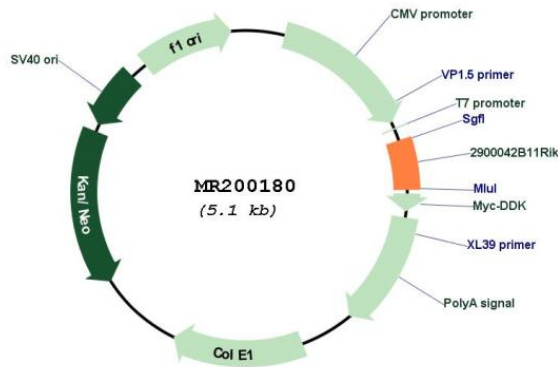


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Cloning Scheme:



Plasmid Map:



ACCN: BC021897

ORF Size: 255 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](#)

<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>	<u><a href="#">BC021897</a></u> , <u><a href="#">AAH21897</a></u>
<b>RefSeq Size:</b>	1537 bp
<b>RefSeq ORF:</b>	257 bp
<b>Locus ID:</b>	72938
<b>Cytogenetics:</b>	4 C7
<b>MW:</b>	9.8 kDa
<b>Gene Summary:</b>	Component of the IFT complex B required for sonic hedgehog/SHH signaling. May mediate transport of SHH components: required for the export of SMO and PTCH1 receptors out of the cilium and the accumulation of GLI2 at the ciliary tip in response to activation of the SHH pathway, suggesting it is involved in the dynamic transport of SHH signaling molecules within the cilium. Not required for ciliary assembly (PubMed:22595669). Its role in intraflagellar transport is mainly seen in tissues rich in ciliated cells such as kidney and testis. Essential for male fertility, spermiogenesis and sperm flagella formation (PubMed:28430876). Plays a role in the early development of the kidney (PubMed:29626631). May be involved in the regulation of ureteric bud initiation (PubMed:29626631).[UniProtKB/Swiss-Prot Function]