

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
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR200180 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGGAAAGTGGATCTCTGCTCAGTCACTGAAGGGACAGAAGTGATTCTGGCCACATCGAGTGATGAAA
 AGCACCCACCTGAAAACATCATTGATGGTCCTGCTTGGCGAGGACGTAGAGGGAAGTCGTATTCTCAGAC
 CTTTCATTCCAAGAAGAGTGGCCAATGGAGAACACACCACCTTTTGTATTCTAATTTTATTTATAT
 GTGGGTTTGCCTACATGTATGGCTGTGCGGATATGTTCACTACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

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

TRTRPLE**QKLISEEDLA**NDILDYKDDDDKV

Restriction Sites: SgfI-MluI


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Cloning Scheme:



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](#)

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.

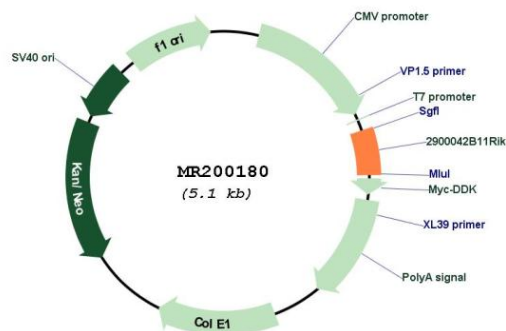
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [BC021897](#), [AAH21897](#)

RefSeq Size: 1537 bp
 RefSeq ORF: 257 bp
 Locus ID: 72938
 Cytogenetics: 4 C7
 MW: 9.8 kDa

Gene Summary: 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]

Product images:



Circular map for MR200180