

Product datasheet for **MG201739**

Ift27 (NM_025931) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ift27 (NM_025931) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Ift27
Synonyms: 2600013G09Rik; Rabl4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201739 representing NM_025931
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGAAGCTAGCTGCCAAATGCATCCTGGCAGGGGACCCAGCCGTAGGCAAGACGGCCCTGGTGCAGA
 TGTTCCGCAGCGACGGGACCCATTTCCAGAAGAACTACACCCTGACAACCTGGAGTGGATTTGGTGGTGAA
 GACAGTCCAGTCTTGACACAAATGACAGTGTGGAACCTTCATTTTGGACTCAGCCGGAAGGAGCTG
 TTCTCTGAAATGCTGGATAAGTTGTGGGAGAATCCCAACGTCCTGTGCCTTGCTATGATGTGACCAATG
 AACAGTCTTCATCAGCTGCACCAAGTGGTTGGAGAAGTCCGGTCTCAGACTTCAGGCATCTCCCTCCC
 AGGTGTTTTAGTGGAACTAAGACAGACCTGGCTGGCCGACAAACAGTGGATTCAGCTCAGGCCAGGTA
 TGGCACTGAGTCAAGGCTGGAATCTTTGAGACATCTGTGAAGGAGATGGATAATTACGAGGCCCCGT
 TCCACTGTCTGGCCAAGCAGTTCTACCAGCTGTACCGGAAAAAGTGGACATATTCATACCCTGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201739 representing NM_025931
 Red=Cloning site Green=Tags(s)

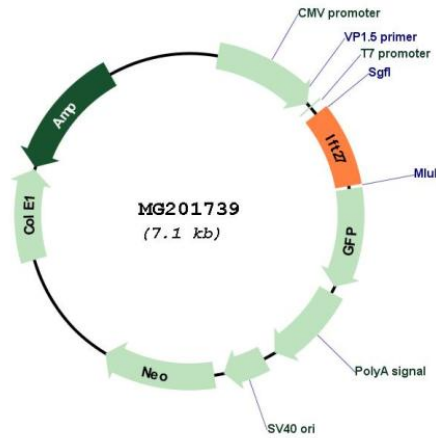
MVKLAAKCILAGDPAVGKTALVQMFRSDGTHFQKNYLLTGVDLVVKTPVPLDTNDSVELFIFDSAGKEL
 FSEMLDKLWENPNVLCVYDVTNEQSFISCTKWLEKVRSTSGISLPGVLVGTKTDLAGRQTVDSAQAQV
 WALSQGLEFFETSVKEMDNYEAPFHCLAKQFYQLYREKVDIFHTLV

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:

Plasmid Map:


ACCN: NM_025931

ORF Size: 558 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:	<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_025931.3</u>
RefSeq Size:	1050 bp
RefSeq ORF:	561 bp
Locus ID:	67042
UniProt ID:	<u>Q9D0P8</u>
Cytogenetics:	15 E1
Gene Summary:	Small GTPase-like component of the intraflagellar transport (IFT) complex B that promotes the exit of the BBSome complex from cilia via its interaction with ARL6 (PubMed:25446516). Not involved in entry of the BBSome complex into cilium. Prevents aggregation of GTP-free ARL6. Required for hedgehog signaling (PubMed:25446516). Forms a subcomplex within the IFT complex B with IFT25 (By similarity). 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:28964737). 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]