

Product datasheet for **MG226142**

Ift122 (NM_031177) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ift122 (NM_031177) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ift122
Synonyms:	C86139; sobp; Wdr10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226142 representing NM_031177 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGAGGGCCGTGTTGACGTGGAGAGACAAAGCGGAGCAGTGTATCTACGACCTCGCATTTAAGCCTGATG
GAACACAACCTGATTCTGGCTGCAGGAAACAGATTGCTGGTTTATGACACCTCTGATGGCACCTTACTTCA
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GTTATGGTCTCCTGAGCAGAAGTCTGTGTCCAAGCACAATCCAGCAGCAAGATCACGTGCTGCAGCTGG
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TTCCAGGAACCGAATGCTAACAGCGTGGCCTGGAACACGCAGTGTGAGGACATGCTCTGCTTCTCTGGAG
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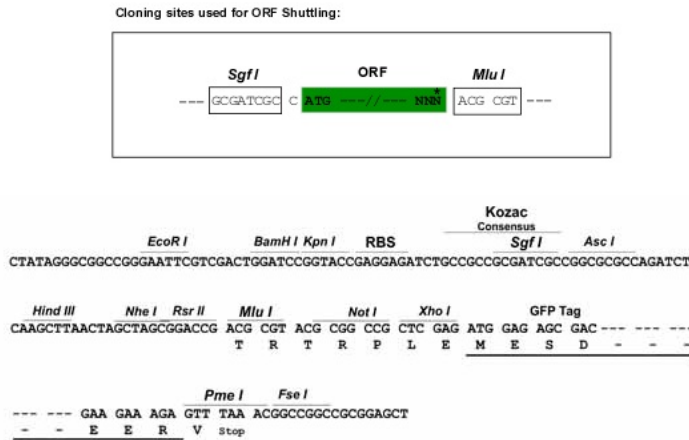
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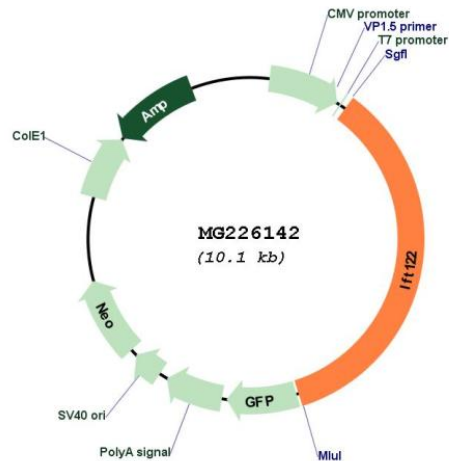
Protein Sequence: >MG226142 representing NM_031177
 Red=Cloning site Green=Tags(s)

MRAVL TWRDKAEQCIYDLAFKPDGTQLILAAGNRLLVYDTS DGTLLQPLKGHKD TVYCVAYAKDGKRFAS
 GSADKSI I IWTSKLEGI LKYTHNDSIQCVSYNPVTHQLASCSSDFLWSPEQKSVSKHKSSSKITCCSW
 TNDGQYLALGMANGI I SIRNKNGEEKVKIERPGGSLSPIWSICWNPSREEHNDILAVADWGQKLSFYQLS
 GKQIGKDRPLNFDPCCSYFTKGEYILVGGSDKQVSLFTKDGVR LGTVGEQNSWVWTCRVKPD SNYVVVG
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 LIYELYSEDSTMHYRVKEKIVKKEFECNLLVVCADH IILCQEKRLQCLSFSGVKEREWQMESLIRYIKVI
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 TNNDLFLADVFSYQGFHEAAKLYKRSGHENLALDMYTDL CMFEYAKDFL GSGDPKETKMLITKQADWAR
 NINEPKAAVEMYISAGEHAKAIEISGSHGWV DMLIDIARKLDKAEREPLLMCACYFKKLDSPGYAAETYL
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 QLTHNAVVE SRFNDAAYYYWMLSMQCLDMAQDPAQKDAML DKFHFFQHLAELYHG YQTIHRYTEEPF SFD
 LPETLFNISKFLHLSTKATPLGTSKVNTLFTLAKQSKALGAYKLARHAYDKLRGLQIPARIQKSIELGT
 LTI RSKPFHDSEELVPLCYRSTNNPLLNNLGNVCINC RPQPFIFSASSYEV LHLVEFYLEEGITDEEAVA
 LIDLEAPRHKREGKWRETSNNSQTLKLD ETMDSIGEDDPFTAKLSFEQGSSEFV PVVVNRSVLRSMSRR
 DVLIKRWPPPLQWQYFRSLLPDASITMCPSCFQMFHSEDYELLVLQHACCPYCRRRIDDTGP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
 Cloning Scheme:



Plasmid Map:


ACCN: NM_031177

ORF Size: 3549 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.

RefSeq: [NM_031177.4](#), [NP_112454.2](#)

RefSeq Size: 4083 bp

RefSeq ORF: 3552 bp

Locus ID: 81896

UniProt ID: [Q6NWW3](#)

Cytogenetics: 6 E3

Gene Summary:

As a component of the IFT complex A (IFT-A), a complex required for retrograde ciliary transport and entry into cilia of G protein-coupled receptors (GPCRs), it is required in ciliogenesis and ciliary protein trafficking (By similarity). Involved in cilia formation during neuronal patterning. Acts as a negative regulator of Shh signaling. Required to recruit TULP3 to primary cilia (PubMed:19000668, PubMed:21209331).[UniProtKB/Swiss-Prot Function]