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Product datasheet for MR226142

Ift122 (NM_031177) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ift122 (NM_031177) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ift122
Synonyms:	C86139; sopb; Wdr10
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR226142 representing NM_031177 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGGCCGTGTTGACGTGGAGAGACAAAGCGGAGCAGTGTATCTACGACCTCGCATTTAAGCCTGATG
GAACACAACTGATTCTGGCTGCAGGAAACAGATTGCTGGTTTATGACACCTCTGATGGCACCTTACTTCA
GCCCCTGAAGGGACACAAAGACACCGTGTACTGTGTGGCGTATGCAAAGGATGGCAAGCGCTTTGCATCT
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ACTCTATTCAGTGTGTCTCCTACAATCCTGTTACCCACCAGCTGGCATCTTGTTCCTCCAGTGACTTTGG
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GAGGCTACCTCAACATCAAGGCCAGCACCTTCCCAGTGCACCAGCAGAAGCTGCAGGGCTTTGTGGTTGG
CTACAACGGCTCCAAGATCTTCTGCCTTCATGTCTTCTCTATGTCTGCCGTGGAGGTGCCACAGTCCGCT
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CCATCACCATGTGCCCCTCCTGCTTTCAGATGTTCCATTCAGAGGACTACGAACTGCTTGTGCTCCAGCA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

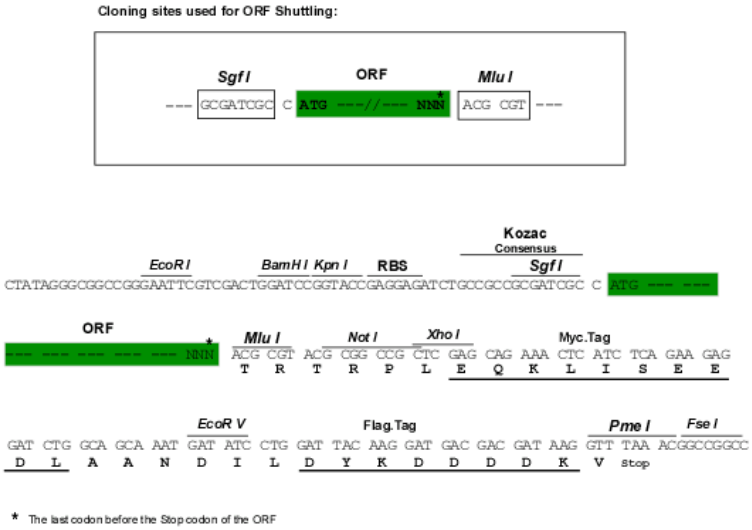
>MR226142 representing NM_031177
Red=Cloning site Green=Tags(s)

MRAVLTWRDKAEQCIYDLAFKPDGTQLILAAGNRLLVYDTSDGTLLQPLKGHKDTVYCVAYAKDGKRFAS
GSADKSIIIWTSKLEGILKYTHNDSIQCVSYNPVTHQLASCSSSDFGLWSPEQKSVSKHKSSSKITCCSW
TNDGQYLALGMANGIISIRNKNGEEKVKIERPGGSLSPIWSICWNPSREEHNDILAVADWGQKLSFYQLS
GKQIGKDRPLNFDPCCISYFTKGEYILVGGSDKQVSLFTKDGVRLGTVGEQNSWVWTCRVKPDSNYVVVG
CQDGTISFYQLIFSTVHGLYKDRYAYRDSMTDVIVQHLITEQKVRIKCRELVKKIAIYKNRLAIQLPEKI
LIYELYSEDSTDMHYRVKEKIVKKFECNLLVVCADHIILCQEKRLQCLSFSGVKEREWQMESLIRYIKVI
GGPAGREGLLVGLKNGQILKIFVDNLFAIVLLKQATAVRCLDMSASRNKLAVVDENDTCLVYDIHTKELL
FQEPNANSVAWNTQCEDMLCFSGGGYLNIKASTFPVHQQKLQGFVVGYNGSKIFCLHVFSMSAVEVPQSA
PMYQYLDRKMFKEAYQIACLGVTDADWRELAMEALEGLEFETARKAFTRVQDLRYLELISSIEERKKRGE
TNNDLFLADVFSYQGKFHEAAKLYKRSGHENLALDMYTDLCMFEYAKDFLGSGDPKETKMLITKQADWAR
NINEPKAAVEMYISAGEHAKAIEISGSHGWVDMLIDIARKLDKAEREPLLMCACYFKKLDSPGYAAETYL
KIGDLKSLVQLYVDTKRWDEAFALGEKHPEFKDDVYVPYAQWLAENDRFEEAQKAFHKAGRQGEAVRVLE
QLTHNAVVESRFNDAAYYYWMLSMQCLDMAQDPAQKDAMLDKFHHFQHLAELYHGYQTIHRYTEEPFSFD
LPETLFNISKFLLHSLTKATPLGISKVNTLFTLAKQSKALGAYKLARHAYDKLRGLQIPARIQKSIELGT
LTIRSKPFHDSEELVPLCYRCSTNNPLLNNLGNVCINCRQPFIFSASSYEVLHLVEFYLEEGITDEEAVA
LIDLEAPRHKREGKWRETSSNNSQTLKLDETMDSIGEDDPFTAKLSFEQGSSEFVPVVVNRSVLRSMSRR
DVLIKRWPPPLQWQYFRSLLPDASITMCPSCFQMFHSEDYELLVLQHACCPYCRRRIDDTGP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

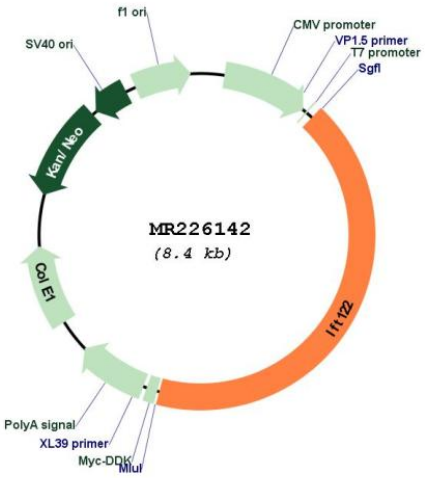
Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_031177
ORF Size:	3546 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_031177.1, NM_031177.2, NM_031177.3, NM_031177.4, NP_112454.2
RefSeq Size:	4083 bp
RefSeq ORF:	3552 bp
Locus ID:	81896
UniProt ID:	Q6NWV3
Cytogenetics:	6 E3

MW:	135.3 kDa
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]