

Product datasheet for RC201751

ILF2 (NM_004515) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ILF2 (NM_004515) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ILF2
Synonyms:	NF45; PRO3063
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201751 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGGGTGACAGAGGCCGTGGTCTGGTGGCGCTTTGGTTCCAGAGGAGGCCAGGAGGAGGGTTCA
GGCCCTTTGTACCACATATCCCATTGACTTCTATTTGTGTGAAATGGCCTTTCCCGGGTCAAGCCAGC
ACCTGATGAAACTTCCTTCAGTGAGGCCTTGCTGAAGAGGAATCAGGACCTGGCTCCCAATTCTGCTGAA
CAGGCATCTATCCTTTCTGGTGACAAAATAAACAATGTGATTGATAATCTGATTGTGGCTCCAGGGA
CATTTGAAGTGCAAATTGAAGAAGTTCGACAGGTGGGATCCTATAAAAAGGGGACAATGACTACAGGACA
CAATGTGGCTGACTGGTGGTGATACTCAAGATTCTGCCAACGTTGGAAGCTGTTGCTGCCCTGGGGAAC
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TTCCTGGCTTTGAGCCCCTCACACCCTGGATCCTTGACCTACTAGGCCATTATGCTGTGATGAACAACCC
CACCAGACAGCCTTTGGCCCTAAACGTTGCATACAGCGCTGCTTGAGATTCTGGCTGCAGGATGTTCC
CTGCCAGGTTTCAGTGGGATCACTGACCCCTGTGAGAGTGGCAACTTTAGAGTACACAGTCATGACCC
TAGAACAGCAGGACATGGTCTGCTATACAGCTCAGACTCTCGTCCGAATCCTCTCACATGGTGGCTTTAG
GAAGATCCTTGGCCAGGAGGGTATGCCAGCTATCTTGCTTCTGAAATATCTACCTGGGATGGAGTGATA
GTAACACCTTCAGAAAAGGCTTATGAGAAGCCACCAGAGAAGAAGGAAGGAGAGGAAGAAGAGGAGAATA
CAGAAGAACCACCTCAAGGAGAGGAAGAAGAAGCATGGAACCTCAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201751 protein sequence
Red=Cloning site Green=Tags(s)

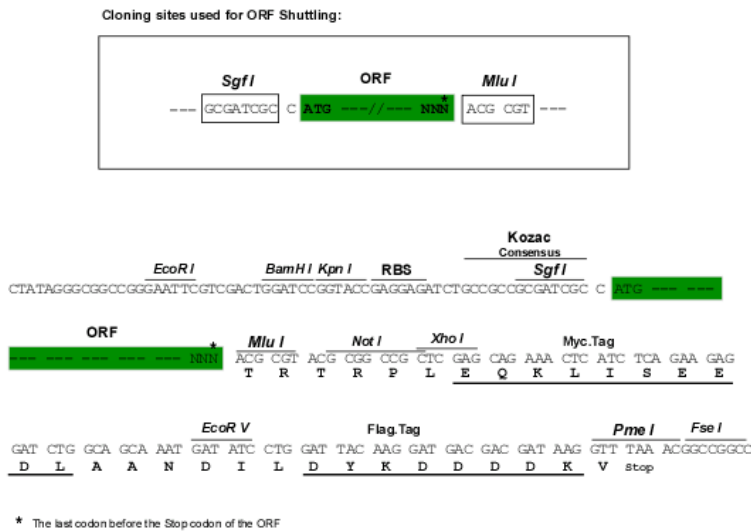
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 QASILSLVTKINNVIDNLIIVAPGTFEVQIEEVQRVGSYKGTMTTGHNVADLVVILKILPTLEAVAALGN
 KVVESLRAQDPSEVL TMLTNETGFEISSDATVKILITTVPPNLRKLDPELHLDIKVLQSALAAIRHARW
 FEENASQSTVKVLIRLLKDLRIRFPGFPELTPWILDLLGHYAVMNNPTROPLALNVAYRRLQILAAGLF
 LPGSVGITDPCESGNFRVHTVMTLEQQDMVCYTAQTLVRI LSHGGFRKILGQEGDASYLASEISTWDGVI
 VTPSEKAYEKPEKKEGEEEEENTEPPQEEEEESMETQE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6092_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004515

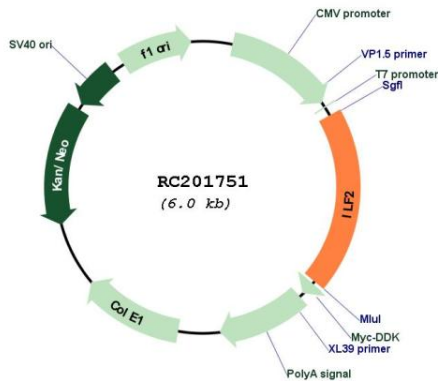
ORF Size: 1170 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

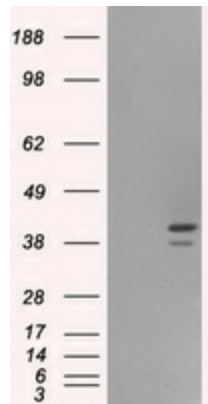
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004515.4
RefSeq Size:	1934 bp
RefSeq ORF:	1173 bp
Locus ID:	3608
UniProt ID:	Q12905
Cytogenetics:	1q21.3
Domains:	DZF
Protein Families:	Druggable Genome, Transcription Factors
MW:	43.1 kDa
Gene Summary:	The protein encoded by this gene is a transcription factor required for T-cell expression of the interleukin 2 gene. It also binds RNA and is an essential component for encapsidation and protein priming of hepatitis B viral polymerase. The encoded 45 kDa protein (NF45, ILF2) forms a complex with the 90 kDa interleukin enhancer-binding factor 3 (NF90, ILF3), and this complex has been shown to affect the redistribution of nuclear mRNA to the cytoplasm, to repair DNA breaks by nonhomologous end joining, and to negatively regulate the microRNA processing pathway. Knockdown of NF45 or NF90 protein retards cell growth, possibly by inhibition of mRNA stabilization. Alternative splicing results in multiple transcript variants. Related pseudogenes have been found on chromosomes 3 and 14. [provided by RefSeq, Dec 2014]

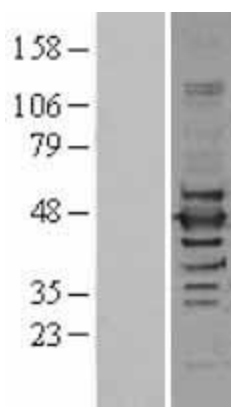
Product images:



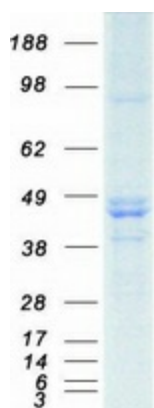
Circular map for RC201751



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ILF2 (Cat# RC201751, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ILF2 (Cat# [TA500674]). Positive lysates [LY401437] (100ug) and [LC401437] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401437]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201751 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ILF2 protein (Cat# [TP301751]). The protein was produced from HEK293T cells transfected with ILF2 cDNA clone (Cat# RC201751) using MegaTran 2.0 (Cat# [TT210002]).