

## Product datasheet for **RC214999**

### **ILF3 (NM\_012218) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ILF3 (NM_012218) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ILF3
Synonyms:	CBTF; DRBF; DRBP76; MMP4; MPHOSPH4; MPP4; MPP4110; NF-AT-90; NF90; NF90a; NF90b; NF90c; NF90ctv; NF110; NF110b; NFAR; NFAR-1; NFAR-2; NFAR2; NFAR90; NFAR110; TCP80; TCP110
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC214999 representing NM\_012218  
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGGATCGCC**

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**Protein Sequence:** >RC214999 protein sequence  
 Red=Cloning site Green=Tags(s)

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MRP M R I F V N D D R H V M A K H S S V Y P T Q E E L E A V Q N M V S H T E R A L K A V S D W I D E Q E K S S E Q A E S D N M D V P P E
D D S K E G A G E Q K T E H M T R T L R G V M R V G L V A K G L L L K G D L D L E L V L L C K E K P T T A L L D K V A D N L A I Q L A A V T
E D K Y E I L Q S V D D A A I V I K N T K E P P L S L T I H L T S P V V R E E M E K V L A G E T L S V N D P P D V L D R Q K C L A A L A S L
R H A K W F Q A R A N G L K S C V I V I R V L R D L C T R V P T W G P L R G W P L E L L C E K S I G T A N R P M G A G E A L R R V L E C L A
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N P V D Y T V Q I P P S T T Y A I T P M K R P M E E D G E E K S P S K K K K I Q K K E E K A E P P Q A M N L M R L N Q L K P G L Q Y K L
V S Q T G P V H A P I F T M S V E V D G N S F E A S G P S K K T A K L H V A V K V L Q D M G L P T G A E G R D S S K G E D S A E E T E A K P
A V V A P A P V V E A V S T P S A A F P S D A T A E Q G P I L T K H G K N P V M E L N E K R R G L K Y E L I S E T G G S H D K R F V M E V E
V D G Q K F Q G A G S N K K V A K A Y A A L A E K L F P D T P L A L D A N K K K R A P V P V R G G P K F A A K P H N P G F G M G G P M H
N E V P P P P N L R G R G R G S I R G R G R G R G F G G A N H G G Y M N A G A G Y G S Y G Y G G N S A T A G Y S Q F Y S N G G H S G N A S
G G G G G G G G S S G Y S Y Q G D N Y N S P V P P K H A G K K Q P H G G Q Q K P S Y G S G Y Q S H Q G Q Q S Y N Q S P S Y N Y G P P
Q Q K Q K G Y N H G Q G S Y S N S Y N S P G G G G S D Y N Y E S K F N Y S G S G R S G G N S Y G S G G A S Y N P G S H G G Y G G S
G G G S S Y Q K Q G G Y S Q S N Y N S P G S G Q N Y S G P P S S Y Q S S Q G Y G R N A D H S M N Y Q Y R
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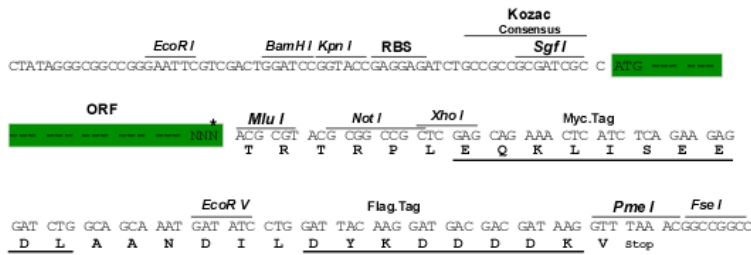
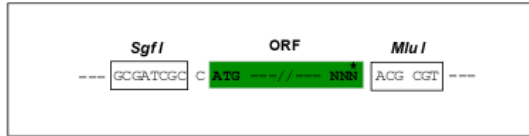
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2787\\_b09.zip](https://cdn.origene.com/chromatograms/mg2787_b09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



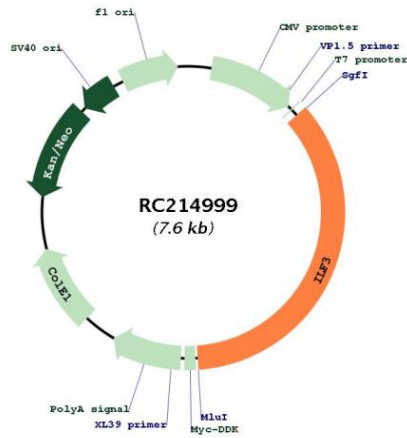
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_012218

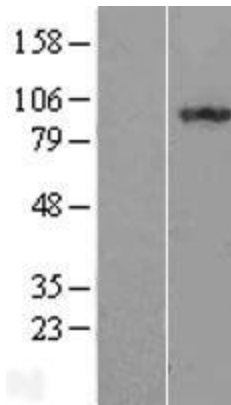
**ORF Size:** 2682 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_012218.4</a>
<b>RefSeq Size:</b>	6058 bp
<b>RefSeq ORF:</b>	2685 bp
<b>Locus ID:</b>	3609
<b>UniProt ID:</b>	<a href="#">Q12906</a>
<b>Cytogenetics:</b>	19p13.2
<b>Domains:</b>	DSRM
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	95.2 kDa
<b>Gene Summary:</b>	This gene encodes a double-stranded RNA (dsRNA) binding protein that complexes with other proteins, dsRNAs, small noncoding RNAs, and mRNAs to regulate gene expression and stabilize mRNAs. This protein (NF90, ILF3) forms a heterodimer with a 45 kDa transcription factor (NF45, ILF2) required for T-cell expression of interleukin 2. This complex has been shown to affect the redistribution of nuclear mRNA to the cytoplasm. Knockdown of NF45 or NF90 protein retards cell growth, possibly by inhibition of mRNA stabilization. In contrast, an isoform (NF110) of this gene that is predominantly restricted to the nucleus has only minor effects on cell growth when its levels are reduced. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Dec 2014]

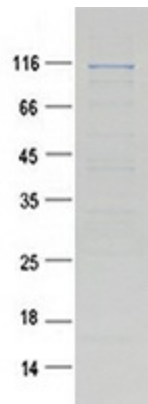
Product images:



Circular map for RC214999



Western blot validation of overexpression lysate (Cat# [LY415895]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214999 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ILF3 protein (Cat# [TP314999]). The protein was produced from HEK293T cells transfected with ILF3 cDNA clone (Cat# RC214999) using MegaTran 2.0 (Cat# [TT210002]).