

**NF90 / ILF3 Antibody (aa302-351)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16344****Specification**

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**NF90 / ILF3 Antibody (aa302-351) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q12906</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	95kDa KDa

**NF90 / ILF3 Antibody (aa302-351) - Additional Information****Gene ID** 3609**Other Names**

Interleukin enhancer-binding factor 3, Double-stranded RNA-binding protein 76, DRBP76, M-phase phosphoprotein 4, MPP4, Nuclear factor associated with dsRNA, NFAR, Nuclear factor of activated T-cells 90 kDa, NF-AT-90, Translational control protein 80, TCP80, ILF3, DRBF, MPHOSPH4, NF90

**Target/Specificity**

NF90 antibody detects endogenous levels of NF90.

**Reconstitution & Storage**

Store at -20°C.

**Precautions**

NF90 / ILF3 Antibody (aa302-351) is for research use only and not for use in diagnostic or therapeutic procedures.

**NF90 / ILF3 Antibody (aa302-351) - Protein Information****Name** ILF3**Synonyms** DRBF, MPHOSPH4, NF90**Function**

RNA-binding protein that plays an essential role in the biogenesis of circular RNAs (circRNAs) which are produced by back-splicing circularization of pre-mRNAs. Within the nucleus, promotes circRNAs processing by stabilizing the regulatory elements residing in the flanking introns of the circularized exons. Plays thereby a role in the back-splicing of a subset of circRNAs (PubMed:<a href="http://www.uniprot.org/citations/28625552" target="\_blank">28625552</a>). As a consequence, participates in a wide range of transcriptional and post-transcriptional processes. Binds to poly-U elements and AU-rich elements (AREs) in the 3'-UTR of target mRNAs (PubMed:<a href="http://www.uniprot.org/citations/14731398" target="\_blank">14731398</a>). Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response

(PubMed:<a href="http://www.uniprot.org/citations/21123651" target="\_blank">21123651</a>, PubMed:<a href="http://www.uniprot.org/citations/34110282" target="\_blank">34110282</a>). Mechanistically, ILF3 becomes phosphorylated and activated by the double-stranded RNA-activated protein kinase/PKR which releases ILF3 from cellular mature circRNAs. In turn, unbound ILF3 molecules are able to interact with and thus inhibit viral mRNAs (PubMed:<a href="http://www.uniprot.org/citations/21123651" target="\_blank">21123651</a>, PubMed:<a href="http://www.uniprot.org/citations/28625552" target="\_blank">28625552</a>).

#### Cellular Location

Nucleus, nucleolus. Cytoplasm. Nucleus. Note=Localizes in the cytoplasm in response to viral infection. The unphosphorylated form is retained in the nucleus by ILF2. Phosphorylation at Thr-188 and Thr-315 causes the dissociation of ILF2 from the ILF2-ILF3 complex resulting in a cytoplasmic sequestration of ILF3. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

#### Tissue Location

Ubiquitous.

#### Volume

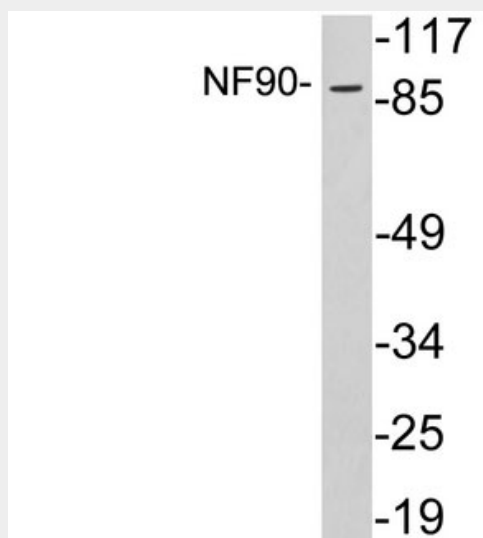
50 µl

#### NF90 / ILF3 Antibody (aa302-351) - Protocols

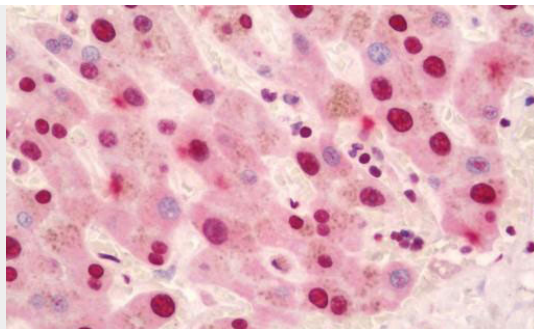
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### NF90 / ILF3 Antibody (aa302-351) - Images



Western blot of extracts from HeLa cells, using NF90 antibody.



Anti-NF90 / ILF3 antibody IHC staining of human liver.

#### **NF90 / ILF3 Antibody (aa302-351) - Background**

May facilitate double-stranded RNA-regulated gene expression at the level of post-transcription. Can act as a translation inhibitory protein which binds to coding sequences of acid beta-glucosidase (GCase) and other mRNAs and functions at the initiation phase of GCase mRNA translation, probably by inhibiting its binding to polysomes. Can regulate protein arginine N- methyltransferase 1 activity. May regulate transcription of the IL2 gene during T-cell activation. Can promote the formation of stable DNA-dependent protein kinase holoenzyme complexes on DNA. The phosphorylated form at Thr-188 and Thr-315, in concert with EIF2AK2/PKR can inhibit vesicular stomatitis virus (VSV) replication (By similarity).

#### **NF90 / ILF3 Antibody (aa302-351) - References**

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Patel R.C.,et al.J. Biol. Chem. 274:20432-20437(1999).  
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Duchange N.,et al.Gene 261:345-353(2000).  
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