

#### ILF3 Rabbit mAb

**Catalog # AP75614** 

## **Specification**

#### ILF3 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC-P, IHC-F, IP, ICC O12906
Human, Rat
Rabbit
Monoclonal Antibody
95338

### ILF3 Rabbit mAb - Additional Information

**Gene ID 3609** 

Other Names ILF3

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Dilution
WB~~1/500-1/1000
IHC-P~~N/A
IHC-F~~N/A
IP~~N/A
ICC~~N/A

**Format** Liquid

### **ILF3 Rabbit mAb - 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>/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>/a>, PubMed:<a href="http://www.uniprot.org/citations/34110282" target="\_blank">34110282</a>/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.

## ILF3 Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# ILF3 Rabbit mAb - Images







