

ILF3 Rabbit mAb Catalog # AP75614

Specification

ILF3 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC, IF
O12906
Human, Rat
Rabbit
Monoclonal Antibody
95338

ILF3 Rabbit mAb - Additional Information

Gene ID 3609

Other Names ILF3

DilutionWB~~1/500-1/1000
IHC~~1/50-1/100
IF~~1/50-1/200

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:28625552). 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:14731398/a>). Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response (PubMed:21123651/a>, PubMed: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





 $href="http://www.uniprot.org/citations/21123651" \ target="_blank">21123651, PubMed:28625552).$

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







