

ILF3 Antibody

Rabbit mAb Catalog # AP91866

Specification

ILF3 Antibody - Product Information

Application WB, IHC, FC, ICC, IP

Primary Accession Q12906
Clonality Monoclonal

Other Names

CBTF; DRBF; MMP4; MPP4; NF90; NFAR; NF110; NF90a; NF90b; NFAR2; TCP80; DRBP76; NF110b;

NFAR-1; TCP110; MPHOSPH4; NF-AT-90;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 95338 Da

ILF3 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

ILF3

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

ILF3 Antibody - 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). Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response (PubMed:21123651, PubMed:34110282). 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: 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 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ILF3 Antibody - Images



