

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

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](http://www.uniprot.org/citations/14731398)). Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response (PubMed: [21123651](http://www.uniprot.org/citations/21123651), PubMed: [34110282](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21123651), PubMed: [28625552](http://www.uniprot.org/citations/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

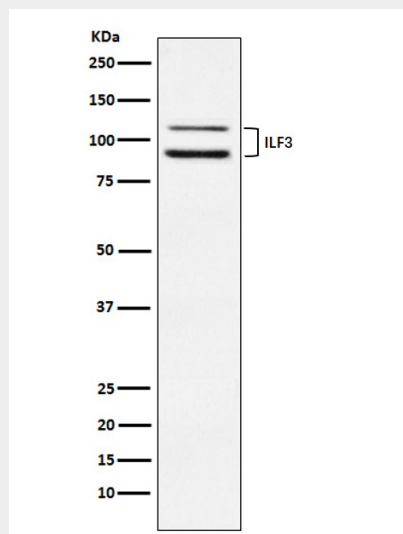
Ubiquitous.

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 Cytometry](#)
- [Cell Culture](#)

ILF3 Antibody - Images



Western blot analysis of ILF3 expression in HeLa cell lysate.