

Anti-ILF3 Rabbit Monoclonal Antibody

Catalog # ABO15375

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	Q12906
Host	Rabbit
Isotype	IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-ILF3 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

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
Calculated MW	95338
Application Details	WB 1:1000-1:5000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 19I51
Immunogen	A synthesized peptide derived from human ILF3
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	ILF3
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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](#)).

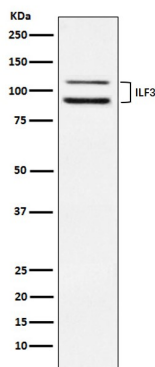
Cellular Location

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.

Images



Western blot analysis of ILF3 expression in HeLa cell lysate.

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