

ILF3 Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF2985a**Specification**

ILF3 Antibody (internal region) - Product Information

Application	IHC, E
Primary Accession	Q12906
Other Accession	NP_036350.2 , NP_060090.2 , 3609
Reactivity	Human
Predicted	Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	95338

ILF3 Antibody (internal region) - 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

Dilution

IHC~~1:100~500

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ILF3 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ILF3 Antibody (internal region) - 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

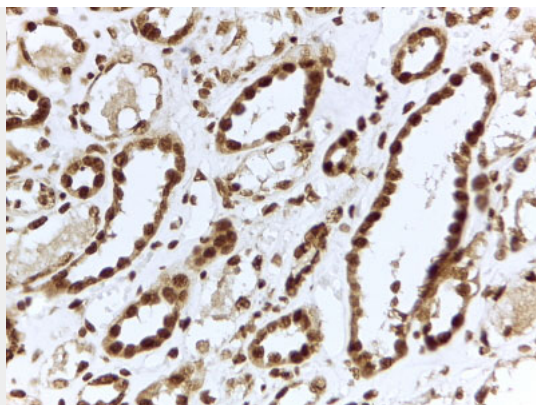
Ubiquitous.

ILF3 Antibody (internal region) - 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 (internal region) - Images



AF2985a (2 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

ILF3 Antibody (internal region) - Background

This antibody is expected to recognize isoforms a (NP_036350.2) and d (NP_060090.2).

ILF3 Antibody (internal region) - References

Nuclear export of NF90 to stabilize IL-2 mRNA is mediated by AKT-dependent phosphorylation at Ser647 in response to CD28 costimulation. Pei Y, Zhu P, Dang Y, Wu J, Yang X, Wan B, Liu JO, Yi Q, Yu L, J. Immunol. 2008 Jan 180 (1): 222-9. PMID: 18097023