

Ilf3 antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI10298

Product Information

Application	WB
Primary Accession	Q9Z1X4
Other Accession	NM_010561 , NP_034691
Reactivity	Human, Mouse, Rat, Pig, Goat, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	96021

Additional Information

Gene ID	16201
Alias Symbol	MPHOSPH4, NF90
Other Names	Interleukin enhancer-binding factor 3, Ilf3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Ilf3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Ilf3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Ilf3
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. 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 (By similarity). Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response. 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.

Cellular Location

Nucleus, nucleolus {ECO:0000250|UniProtKB:Q12906}. 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. Expressed at high levels in the thymus, testis, ovary and at lower levels in the spleen

Images

