SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-IFI16 antibody

Catalog Number: SL15548R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	IFI16
Immunogen:	KLH conjugated synthetic peptide derived from human IFI16: 701-785/785
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Mouse(predicted:Human)
Predicted MW.:	88kDa
Subcellular Location:	The nucleus cytoplasmic
Background:	IFI16 is a member of the HIN-200 (hematopoietic interferon-inducible nuclear antigens with 200 amino acid repeats) family of cytokines. The encoded protein contains domains involved in DNA binding, transcriptional regulation, and protein-protein interactions. The protein localizes to the nucleoplasm and nucleoli, and interacts with p53 and retinoblastoma-1. It modulates p53 function, and inhibits cell growth in the Ras/Raf signaling pathway. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. **Function:** Binds double-stranded DNA. Binds preferentially to supercoiled DNA and cruciform DNA structures. Seems to be involved in transcriptional regulation. May function as a transcriptional repressor. Could have a role in the regulation of hematopoietic differentiation through activation of unknown target genes. Controls cellular proliferation by modulating the functions of cell cycle regulatory factors including p53/TP53 and the retinoblastoma protein.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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	May be involved in TP53-mediated transcriptional activation by enhancing TP53 sequence-specific DNA binding and modulating TP53 phosphorylation status. Seems to be involved in energy-level-dependent activation of the ATM/AMPK/TP53 pathway coupled to regulation of autophagy. May be involved in regulation of TP53-mediated cell death also involving BRCA1. May be involved in the senescence of prostate epithelial cells. Involved in innate immune response by recognizing viral dsDNA in the cytosol and probably in the nucleus. After binding to viral DNA in the cytoplasm recruits TMEM173/STING and mediates the induction of IFN-beta. Has anti-inflammatory activity and inhibits the activation of the AIM2 inflammasome, probably via association with AIM2. Proposed to bind viral DNA in the nucleus, such as of Kaposi's sarcoma-associated herpesvirus, and to induce the formation of nuclear caspase-1-activating inflammasome formation via association with PYCARD. Inhibits replication of herpesviruses such as human cytomegalovirus (HCMV) probably by interfering with promoter recruitment of members of the Sp1 family of transcription factors. **Subunit:** Forms homooligomers; isoform 2 can self-associate or associate with isoform 1 or isoform 3. Interacts with TMEM173, AIM2, PYCARD and CASP1. Interacts with BRCA1, TP53, E2F1, RB1 and SP1. **Subcellular Location:** Nucleus. Cytoplasm. Note=Cellular distribution is dependent on the acetylation status of the multipartite nuclear localization signal (NLS); NLS acetylation promotes cytoplasmic localization. **Tissue Specificity:** Expressed in peripheral blood leukocytes, fibroblasts and lymphoid cells. Present in myeloid precursors (CD34+) and throughout monocyte development, but its expression is down-regulated in erythroid and polymorphonuclear precursor cells. Present in prostate, ovary and breast (at protein level). **Post-translational modifications:** Lysine acetylation in the multipartite nuclear localization signal (NLS) regulates the subcellular location. In vitro can be acetylated by p300/EP300 coupled to cytoplasmic localization. Phosphorylated on Ser and Thr. Isoform 3 seems to show a minor degree of complex carbohydrate addition. **Similarity:** Belongs to the HIN-200 family. Contains 1 DAPIN domain. Contains 2 HIN-200 domains. **Database links:** **Entrez Gene:** 3428 Human Omim: 147586 Human **SwissProt:** Q16666 Human **Unigene:** 380250 Human

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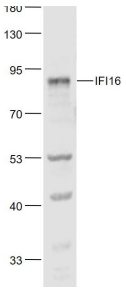
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[VALIDATION IMAGES]



Sample:
Cerebellum (Mouse) Lysate at 40 ug
Primary: Anti- IFI16 (SL15548R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 88 kD
Observed band size: 88 kD

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