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IFI16 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50199

Product Information

Application	WB
Primary Accession	Q16666
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	88256

Additional Information

Gene ID	3428
Other Names	Gamma-interferon-inducible protein 16, Ifi-16, Interferon-inducible myeloid differentiation transcriptional activator, IFI16, IFNGIP1
Dilution	WB~~1:500-1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

Protein Information

Name	IFI16 {ECO:0000303|PubMed:1526658, ECO:0000312|HGNC:HGNC:5395}
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. 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. Necessary to activate the IRF3 signaling cascade during human herpes simplex virus 1 (HHV-1) infection and promotes the assembly of heterochromatin on herpesviral DNA and inhibition of viral immediate- early gene expression and replication. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer.
Cellular Location	Nucleus. Cytoplasm. Note=Cellular distribution is dependent on the acetylation status of the multipartite nuclear localization signal (NLS); NLS acetylation promotes cytoplasmic localization Localizes in the nucleus during human herpes simplex virus 1 (HHV-1) infection.
Tissue Location	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)

Background

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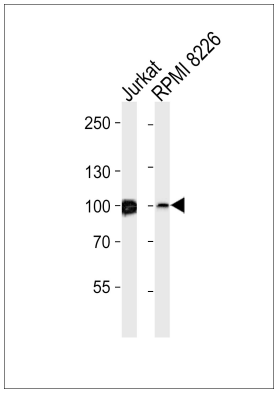
References

Trapani J.A.,et al.Immunogenetics 36:369-376(1992).
Trapani J.A.,et al.Immunogenetics 40:415-424(1994).
Jiang C.,et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
Xin H.,et al.Oncogene 22:4831-4840(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images

Western blot analysis of lysates from Jurkat,RPMI 8226 cell line (from left to right),using IFI16 Antibody(C15867). C15867 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as



the secondary antibody.Lysates at 35ug per lane.