

IFI35 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP59355

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P80217
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31546
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IFI35
Epitope Specificity	101-200/286
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus. Nuclear following IFN treatment.
SIMILARITY	Belongs to the NMI family.
SUBUNIT	Homodimer. Also interacts with B-ATF.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The Interferon family of proteins are able to alter the expression of a variety of target genes, thereby controlling various events within the cell. IFI-35 (Interferon-induced 35 kDa protein), also known as IFP35, is a 286 amino acid interferon-induced protein. Localized to the nucleus and expressed in macrophages, fibroblasts and epithelial cells, IFI-35 is a leucine zipper protein that can form homodimers, but, unlike most leucine zipper proteins, cannot bind DNA. Upon induction by IFN- γ IFI-35 associates with Nmi (N-Myc-interacting protein), resulting in the formation of a high molecular weight complex that is thought to play a role in IFN- γ signaling and cellular responses. Once complexed with Nmi, IFI-35 is unable to be degraded by the proteasome, suggesting that IFI-35 is protected from degradation only when needed by IFN- γ . Two isoforms of IFI-35 exist due to alternative splicing events.

Additional Information

Gene ID	3430
Other Names	Interferon-induced 35 kDa protein, IFP 35, Ifi-35, IFI35 (HGNC:5399)
Target/Specificity	In a wide range of cell types, including fibroblasts, macrophages, and epithelial cells.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-10000

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	IFI35 (HGNC:5399)
Function	Acts as a signaling pathway regulator involved in innate immune system response (PubMed: 26342464 , PubMed: 29038465 , PubMed: 29350881). In response to interferon IFN-alpha, associates in a complex with signaling pathway regulator NMI to regulate immune response; the complex formation prevents proteasome-mediated degradation of IFI35 and correlates with IFI35 dephosphorylation (PubMed: 10779520 , PubMed: 10950963). In complex with NMI, inhibits virus-triggered type I interferon/IFN-beta production (PubMed: 26342464). In complex with NMI, negatively regulates nuclear factor NF-kappa-B signaling by inhibiting the nuclear translocation, activation and transcription of the NF-kappa-B subunit p65/RELA, resulting in the inhibition of endothelial cell proliferation, migration and re-endothelialization of injured arteries (PubMed: 29350881). Beside its role as an intracellular signaling pathway regulator, also functions extracellularly as damage-associated molecular patterns (DAMPs) to promote inflammation when actively released by macrophage to the extracellular space during cell injury and pathogen invasion (PubMed: 29038465). Macrophage-secreted IFI35 activates NF-kappa-B signaling in adjacent macrophages through Toll- like receptor 4/TLR4 activation, thereby inducing NF-kappa-B translocation from the cytoplasm into the nucleus which promotes the release of pro-inflammatory cytokines (PubMed: 29038465).
Cellular Location	Cytoplasm. Nucleus. Secreted Note=Cytoplasmic IFI35 localizes in punctate granular structures (PubMed:10950963). Nuclear localization increased is stimulated by IFN- alpha (PubMed:10950963, PubMed:8288566). Extracellular following secretion by macrophage (PubMed:29038465)
Tissue Location	Expressed in a wide range of cell types, including fibroblasts, macrophages, and epithelial cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.