

# **IFI35 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59355

# **Specification**

# **IFI35 Polyclonal Antibody - Product Information**

Application

Primary Accession Reactivity

Host Clonality Calculated MW Physical State

Immunogen

**Epitope Specificity** 

Isotype **Purity** 

Buffer

affinity purified by Protein A

anning parinea by Frotein A

SUBCELLULAR LOCATION

SIMILARITY
SUBUNIT
Important Note

IHC-P, IHC-F, IF, E

P80217

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 31 KDa Liquid

KLH conjugated synthetic peptide derived

from human IFI35

101-200/286

laG

0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

Nucleus. Nuclear following IFN treatment.

Belongs to the NMI family.

Homodimer. Also interacts with B-ATF. 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-? 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-?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-? Two isoforms of IFI-35 exist due to alternative splicing events.

### IFI35 Polyclonal Antibody - Additional Information

**Gene ID 3430** 

### **Other Names**

Interferon-induced 35 kDa protein, IFP 35, Ifi-35, IFI35 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=5399" target="\_blank">HGNC:5399</a>)



## **Target/Specificity**

In a wide range of cell types, including fibroblasts, macrophages, and epithelial cells.

#### **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class ="dilution\_E">E~~N/A</span>

#### 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.

# IFI35 Polyclonal Antibody - Protein Information

Name IFI35 (<u>HGNC:5399</u>)

### **Function**

Acts as a signaling pathway regulator involved in innate immune system response (PubMed: <a href="http://www.uniprot.org/citations/26342464" target="\_blank">26342464</a>, PubMed:<a href="http://www.uniprot.org/citations/29038465" target="\_blank">29038465</a>, PubMed:<a href="http://www.uniprot.org/citations/29350881" target="\_blank">29350881</a>). 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:<a href="http://www.uniprot.org/citations/10779520" target=" blank">10779520</a>, PubMed:<a href="http://www.uniprot.org/citations/10950963" target="blank">10950963</a>). In complex with NMI, inhibits virus-triggered type I interferon/IFN-beta production (PubMed:<a href="http://www.uniprot.org/citations/26342464" target=" blank">26342464</a>). 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:<a href="http://www.uniprot.org/citations/29350881" target=" blank">29350881</a>). 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: <a href="http://www.uniprot.org/citations/29038465" target="\_blank">29038465</a>). Macrophage-secreted IFI35 activates NF-kappa-B signaling in adjacent macrophages through Tolllike 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: <a href="http://www.uniprot.org/citations/29038465" target=" blank">29038465</a>).

### **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). Extracelullar following secretion by macrophage (PubMed:29038465)

### **Tissue Location**

Expressed in a wide range of cell types, including fibroblasts, macrophages, and epithelial cells

## **IFI35 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.





- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IFI35 Polyclonal Antibody - Images