

Mouse Irf3 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20073a

Specification

Mouse Irf3 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P70671
Other Accession	Q764M6 , Q4JF28 , NP_058545.1
Reactivity	Mouse
Predicted	Bovine, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	46852
Antigen Region	46-72

Mouse Irf3 Antibody (N-term) - Additional Information

Gene ID 54131

Other Names

Interferon regulatory factor 3, IRF-3, Irf3

Target/Specificity

This Mouse Irf3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-72 amino acids from the N-terminal region of mouse Irf3.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Irf3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Irf3 Antibody (N-term) - Protein Information

Name Irf3

Function Key transcriptional regulator of type I interferon (IFN)- dependent immune responses

which plays a critical role in the innate immune response against DNA and RNA viruses (PubMed:[15800576](#)). Regulates the transcription of type I IFN genes (IFN- α and IFN- β) and IFN-stimulated genes (ISG) by binding to an interferon- stimulated response element (ISRE) in their promoters (PubMed:[15800576](#)). Acts as a more potent activator of the IFN- β (IFNB) gene than the IFN- α (IFNA) gene and plays a critical role in both the early and late phases of the IFNA/B gene induction (PubMed:[16846591](#), PubMed:[16979567](#), PubMed:[20049431](#)). Found in an inactive form in the cytoplasm of uninfected cells and following viral infection, double-stranded RNA (dsRNA), or toll-like receptor (TLR) signaling, is phosphorylated by IKBKE and TBK1 kinases (PubMed:[16846591](#), PubMed:[16979567](#), PubMed:[20049431](#)). This induces a conformational change, leading to its dimerization and nuclear localization and association with CREB binding protein (CREBBP) to form dsRNA-activated factor 1 (DRAFI), a complex which activates the transcription of the type I IFN and ISG genes (PubMed:[16846591](#), PubMed:[16979567](#), PubMed:[20049431](#)). Can activate distinct gene expression programs in macrophages and can induce significant apoptosis in primary macrophages (PubMed:[16846591](#), PubMed:[16979567](#), PubMed:[20049431](#)).

Cellular Location

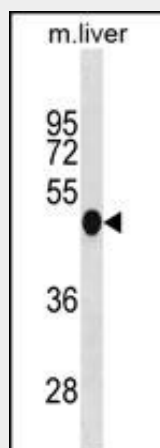
Cytoplasm {ECO:0000250|UniProtKB:Q14653}. Nucleus {ECO:0000250|UniProtKB:Q14653}. Mitochondrion {ECO:0000250|UniProtKB:Q14653}. Note=Shuttles between cytoplasmic and nuclear compartments, with export being the prevailing effect. When activated, IRF3 interaction with CREBBP prevents its export to the cytoplasm. Recruited to mitochondria via TOMM70:HSP90AA1 upon Sendai virus infection. {ECO:0000250|UniProtKB:Q14653}

Mouse Irf3 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mouse Irf3 Antibody (N-term) - Images



MOUSE Irf3 Antibody (N-term) (Cat. #AP20073a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the MOUSE Irf3 antibody detected the MOUSE Irf3 protein

(arrow).

Mouse Irf3 Antibody (N-term) - Background

Mediates interferon-stimulated response element (ISRE) promoter activation. Functions as a molecular switch for antiviral activity. DsRNA generated during the course of an viral infection leads to IRF3 phosphorylation on the C-terminal serine/threonine cluster. This induces a conformational change, leading to its dimerization, nuclear localization and association with CREB binding protein (CREBBP) to form dsRNA-activated factor 1 (DRAF1), a complex which activates the transcription of genes under the control of ISRE. The complex binds to the IE and PRDIII regions on the IFN-alpha and IFN-beta promoters respectively. IRF-3 does not have any transcription activation domains (By similarity).

Mouse Irf3 Antibody (N-term) - References

Marichal, T., et al. J. Allergy Clin. Immunol. 126(4):836-844(2010)
Menachery, V.D., et al. J. Virol. 84(19):9685-9694(2010)
Carrigan, S.O., et al. J. Immunol. 185(6):3602-3609(2010)
Wang, J., et al. J. Immunol. 185(3):1720-1729(2010)
Farlik, M., et al. Immunity 33(1):25-34(2010)