

IRF1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11860c

Specification

IRF1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P10914
Other Accession	P23570 , A0FIN4 , P15314 , Q3SZP0 , NP_002189.1
Reactivity Predicted	Human Bovine, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	36502
Antigen Region	74-102

IRF1 Antibody (Center) - Additional Information

Gene ID 3659

Other Names

Interferon regulatory factor 1, IRF-1, IRF1

Target/Specificity

This IRF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 74-102 amino acids from the Central region of human IRF1.

Dilution

WB~~1:1000

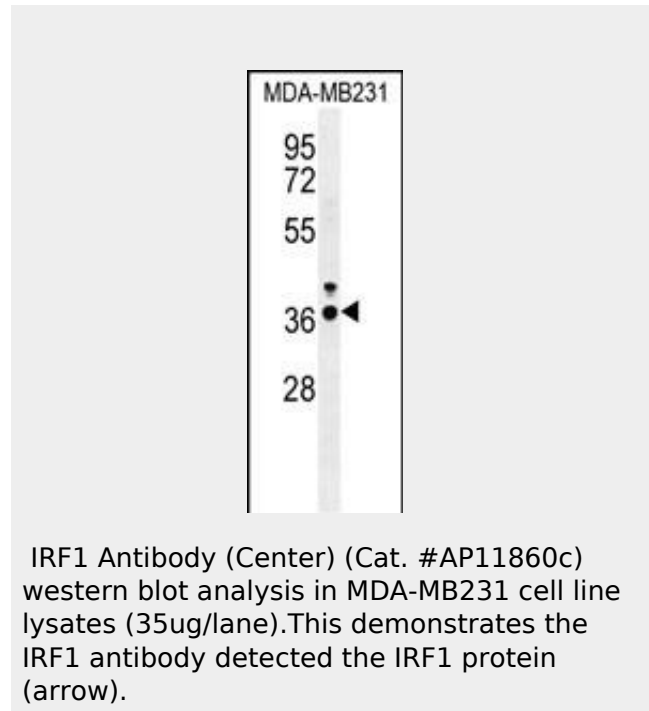
Format

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



IRF1 Antibody (Center) - Background

IRF1 encodes interferon regulatory factor 1, a member of the interferon regulatory transcription factor (IRF) family. IRF1 serves as an activator of interferons alpha and beta transcription, and in mouse it has been shown to be required for double-stranded RNA induction of these genes. IRF1 also functions as a transcription activator of genes induced by interferons alpha, beta, and gamma. Further, IRF1 has been shown to play roles in regulating apoptosis and tumor-suppression.

IRF1 Antibody (Center) - References

- Silva, L.K., et al. Eur. J. Hum. Genet. 18(11):1221-1227(2010)
- Matsuzaki, S., et al. J. Immunol. 185(8):4863-4872(2010)
- Antonios, D., et al. J. Immunol.

IRF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

185(1):89-98(2010)
Lou, Y.J., et al. Zhonghua Yi Xue Yi Chuan Xue
Za Zhi 27(3):255-258(2010)
Schuurhof, A., et al. Pediatr. Pulmonol.
45(6):608-613(2010)

IRF1 Antibody (Center) - Protein Information

Name IRF1

Function

Transcriptional regulator which displays a remarkable functional diversity in the regulation of cellular responses (PubMed:15226432, PubMed:15509808, PubMed:17516545, PubMed:17942705, PubMed:18497060, PubMed:19404407, PubMed:19851330, PubMed:22367195, PubMed:32385160). Regulates transcription of IFN and IFN-inducible genes, host response to viral and bacterial infections, regulation of many genes expressed during hematopoiesis, inflammation, immune responses and cell proliferation and differentiation, regulation of the cell cycle and induction of growth arrest and programmed cell death following DNA damage (PubMed:15226432, PubMed:15509808, PubMed:17516545, PubMed:<a href="http://www.uniprot.org/ci

tations/17942705"
target="_blank">17942705,
PubMed:<a href="http://www.uniprot.org/ci
tations/18497060"
target="_blank">18497060,
PubMed:<a href="http://www.uniprot.org/ci
tations/19404407"
target="_blank">19404407,
PubMed:<a href="http://www.uniprot.org/ci
tations/19851330"
target="_blank">19851330,
PubMed:<a href="http://www.uniprot.org/ci
tations/22367195"
target="_blank">22367195).
Stimulates both innate and acquired
immune responses through the activation of
specific target genes and can act as a
transcriptional activator and repressor
regulating target genes by binding to an
interferon-stimulated response element
(ISRE) in their promoters (PubMed:<a href=
"http://www.uniprot.org/citations/15226432
" target="_blank">15226432,
PubMed:<a href="http://www.uniprot.org/ci
tations/15509808"
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PubMed:<a href="http://www.uniprot.org/ci
tations/17516545"
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tations/19851330"
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tations/21389130"
target="_blank">21389130,
PubMed:<a href="http://www.uniprot.org/ci
tations/22367195"
target="_blank">22367195).
Competes with the transcriptional repressor
ZBED2 for binding to a common consensus
sequence in gene promoters (PubMed:<a hr
ef="http://www.uniprot.org/citations/32385
160" target="_blank">32385160). Its
target genes for transcriptional activation
activity include: genes involved in anti-viral
response, such as IFN-alpha/beta,
DDX58/RIG-I, TNFSF10/TRAIL, ZBP1,
OAS1/2, PIAS1/GBP, EIF2AK2/PKR and

RSAD2/viperin; antibacterial response, such as NOS2/INOS; anti-proliferative response, such as p53/TP53, LOX and CDKN1A; apoptosis, such as BBC3/PUMA, CASP1, CASP7 and CASP8; immune response, such as IL7, IL12A/B and IL15, PTGS2/COX2 and CYBB; DNA damage responses and DNA repair, such as POLQ/POLH; MHC class I expression, such as TAP1, PSMB9/LMP2, PSME1/PA28A, PSME2/PA28B and B2M and MHC class II expression, such as CIITA; metabolic enzymes, such as ACOD1/IRG1 (PubMed:15226432, PubMed:15509808, PubMed:17516545, PubMed:17942705, PubMed:18497060, PubMed:19404407, PubMed:19851330, PubMed:22367195).

Represses genes involved in anti-proliferative response, such as BIRC5/survivin, CCNB1, CCNE1, CDK1, CDK2 and CDK4 and in immune response, such as FOXP3, IL4, ANXA2 and TLR4 (PubMed:18641303, PubMed:22200613).

Stimulates p53/TP53-dependent transcription through enhanced recruitment of EP300 leading to increased acetylation of p53/TP53 (PubMed:15509808, PubMed:18084608). Plays an important role in immune response directly affecting NK maturation and activity,

macrophage production of IL12, Th1 development and maturation of CD8+ T-cells (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750). Also implicated in the differentiation and maturation of dendritic cells and in the suppression of regulatory T (Treg) cells development (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750). Acts as a tumor suppressor and plays a role not only in antagonism of tumor cell growth but also in stimulating an immune response against tumor cells (PubMed:20049431).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P15314}.

Cytoplasm

{ECO:0000250|UniProtKB:P15314}.

Note=MYD88-associated IRF1 migrates into the nucleus more efficiently than non-MYD88-associated IRF1

{ECO:0000250|UniProtKB:P15314}

IRF1 Antibody (Center) - 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](#)