10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Irf1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11062

Product Information

Application	WB
Primary Accession	P15314
Other Accession	NM_008390, NP_032416
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine, Sheep, Yeast
Predicted	Human, Mouse, Rat, Rabbit, Pig, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37319

Additional Information

Gene ID	16362
Alias Symbol	AU020929, Irf-1
Other Names	Interferon regulatory factor 1, IRF-1, Irf1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Irf1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Irf1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

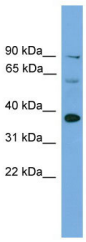
Name	Irf1
Function	Transcriptional regulator which displays a remarkable functional diversity in the regulation of cellular responses (PubMed:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431, PubMed:25774715). Regulates transcription of IFN and IFN-inducible genes, host response 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:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). 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:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431). Has an essentail role in IFNG-dependent immunity to mycobacteria (By similarity). Binds to a consensus sequence in gene promoters (By similarity). Its target genes for transcriptional activation activity are: genes involved in anti-viral response, such as IFN-alpha/beta, RIGI, TNFSF10/TRAIL, ZBP1, OAS1/2, PIAS1/GBP, EIF2AK2/PKR and RSAD2/viperin; antibacterial response, such as GBP2, GBP5, IRGB10 and 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:12387893, PubMed:17018642, PubMed:18955028, PubMed:20308629, PubMed:21909274, PubMed:25774715, PubMed:27693356, PubMed:29321274, PubMed:30635240). 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). Stimulates p53/TP53-dependent transcription through enhanced recruitment of EP300 leading to increased acetylation of p53/TP53 (By similarity). 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, PubMed:20049431). 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, PubMed:20049431). 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:11244049, PubMed:11846971, PubMed:11846974, PubMed:16932750, PubMed:20049431).

Cellular Location

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

Images



WB Suggested Anti-Irf1 Antibody Titration: 0.2-1 µg/ml
Positive Control: Mouse Uterus