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

IRF4 Antibody
Catalog # ASC11324

Specification

IRF4 Antibody - Product Information

Application	**WB, IF, ICC, E**
Primary Accession	Q15306
Other Accession	NP_002451, 167555104
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**IRF4 antibody can be used for detection of IRF4 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.**

IRF4 Antibody - Additional Information

Gene ID **3662**

Target/Specificity
IRF4; IRF4 antibody is predicted to not cross-react with other IRF protein family members. IRF4 often migrates at a higher than predicted molecular weight in SDS-PAGE.

Reconstitution & Storage
IRF4 antibody can be stored at 4 ℃, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
IRF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IRF4 Antibody - Protein Information

Name IRF4 {ECO:0000303|PubMed:15489334, ECO:0000303|PubMed:8921401}

Function
Transcriptional activator. Binds to the interferon-stimulated response element (ISRE) of the MHC class I promoter. Binds the immunoglobulin lambda light chain enhancer, together with PU.1. Probably plays a role in ISRE-targeted signal transduction mechanisms specific to lymphoid cells. Involved in CD8(+) dendritic cell differentiation by forming a complex with the BATF-JUNB heterodimer in immune cells, leading to recognition of AICE sequence (5'-TGAnTCA/GAAA- 3'), an immune-specific regulatory element, followed by cooperative binding of BATF and IRF4 and activation of genes.

Cellular Location
Nucleus. Cytoplasm

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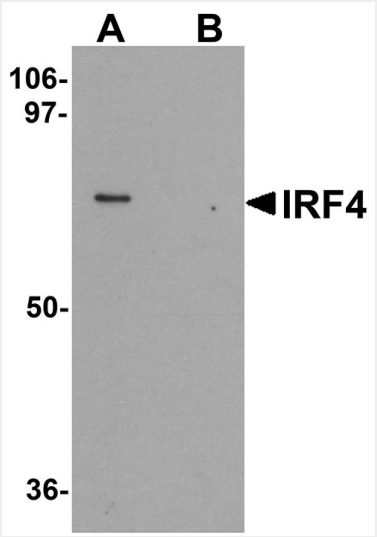
Tissue Location
Lymphoid cells.

IRF4 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IRF4 Antibody - Images



Western blot analysis of IRF4 in Jurkat cell lysate with IRF4 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

Immunocytochemistry of IRF4 in Jurkat cells with IRF4 antibody at 10 µg/mL.

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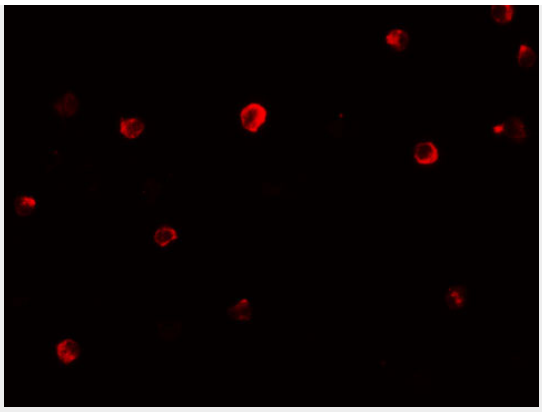

Immunofluorescence of IRF4 in Jurkat cells with IRF4 antibody at 20 µg/mL.

IRF4 Antibody - Background

IRF4 Antibody: Interferons (IFNs) are involved in a multitude of immune interactions during viral infections and play a major role in both the induction and regulation of innate and adaptive antiviral mechanisms. During infection, host-virus interactions signal downstream molecules such as transcription factors such as IFN regulatory factor-3 (IRF3) which can act to stimulate transcription of IFN-alpha/beta genes. Another member, IRF7 has been shown to play a role in the transcriptional activation of virus-inducible cellular genes, including interferon beta chain genes. IRF4 expression is tightly regulated in resting primary T cells and plays an essential role in the homeostasis and function of mature lymphocytes. IRF4 is induced by Toll-like receptor (TLR) activation and acts as a negative regulator of TLR signaling.

IRF4 Antibody - References

Malmgaard L. Induction and regulation of IFNs during viral infections. J. Interferon & Cyto. Res. 2004; 24:439-54
Sato M, Suemori H, Hata N, et al. Distinct and essential roles of transcription factors IRF-3 and IRF-7 in response to viruses for IFN-alpha/beta gene induction. Immunity 2000; 13:539-48.
Mittrucker HW, Matsuyama T, Grossman A, et al. Requirement for the transcription factor LSIRF/IRF4 for mature B and T lymphocyte function. Science 1997; 275:540-3.
Negishi H, Ohba Y, Yanai H, et al. Negative regulation of Toll-like-receptor signaling by IRF4. Proc. Natl. Acad. Sci. USA 2005; 102:15989-94