

Goat Anti-ICSBP1 / IRF8 Antibody

Peptide-affinity purified goat antibody Catalog # AF1551a

Specification

Goat Anti-ICSBP1 / IRF8 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW

WB, E <u>Q02556</u> <u>NP_002154</u>, <u>3394</u>, <u>15900 (mouse)</u> Human Mouse, Rat Goat Polyclonal 100ug/200ul IgG 48356

Goat Anti-ICSBP1 / IRF8 Antibody - Additional Information

Gene ID 3394

Other Names Interferon regulatory factor 8, IRF-8, Interferon consensus sequence-binding protein, H-ICSBP, ICSBP, IRF8, ICSBP1

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat Anti-ICSBP1 / IRF8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ICSBP1 / IRF8 Antibody - Protein Information

Name IRF8 {ECO:0000303|PubMed:21524210, ECO:0000312|HGNC:HGNC:5358}

Function

Transcription factor that specifically binds to the upstream regulatory region of type I interferon



(IFN) and IFN-inducible MHC class I genes (the interferon consensus sequence (ICS)) (PubMed:25122610). Can both act as a transcriptional activator or repressor (By similarity). Plays a negative regulatory role in cells of the immune system (By similarity). 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 IRF8 and activation of genes (By similarity). Required for the development of plasmacytoid dendritic cells (pDCs), which produce most of the type I IFN in response to viral infection (By similarity). Positively regulates macroautophagy in dendritic cells (PubMed:29434592). Acts as a transcriptional repressor of osteoclast differentiation factors such as NFATC1 and EEIG1 (By similarity).

Cellular Location

Nucleus. Cytoplasm Note=In resting macrophages, localizes in the cytoplasm. Translocated in the nucleus upon IFN-gamma induction.

Tissue Location

Predominantly expressed in lymphoid tissues.

Goat Anti-ICSBP1 / IRF8 Antibody - Protocols

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

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

Goat Anti-ICSBP1 / IRF8 Antibody - Images



AF1551a staining (1 μ g/ml) of K562 lysate (RIPA buffer, 30 μ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



Goat Anti-ICSBP1 / IRF8 Antibody - Background

Interferon consensus sequence-binding protein (ICSBP) is a transcription factor of the interferon (IFN) regulatory factor (IRF) family. Proteins of this family are composed of a conserved DNA-binding domain in the N-terminal region and a divergent C-terminal region that serves as the regulatory domain. The IRF family proteins bind to the IFN-stimulated response element (ISRE) and regulate expression of genes stimulated by type I IFNs, namely IFN-alpha and IFN-beta. IRF family proteins also control expression of IFN-alpha and IFN-beta-regulated genes that are induced by viral infection.

Goat Anti-ICSBP1 / IRF8 Antibody - References

The combination of gene perturbation assay and ChIP-chip reveals functional direct target genes for IRF8 in THP-1 cells. Kubosaki A, et al. Mol Immunol, 2010 Aug. PMID 20573402.

Activation of IL-27 p28 gene transcription by interferon regulatory factor 8 in cooperation with interferon regulatory factor 1. Zhang J, et al. J Biol Chem, 2010 Jul 9. PMID 20435892.

Validation of the CD6 and TNFRSF1A loci as risk factors for multiple sclerosis in Spain. Swaminathan B, et al. J Neuroimmunol, 2010 Jun. PMID 20430450.

Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.

Common variants at 2q37.3, 8q24.21, 15q21.3 and 16q24.1 influence chronic lymphocytic leukemia risk. Crowther-Swanepoel D, et al. Nat Genet, 2010 Feb. PMID 20062064.