

Anti-IRF8 Antibody

Catalog # ABO11520

Specification

Anti-IRF8 Antibody - Product Information

Application **WB** Q02556 **Primary Accession** Host Rabbit Reactivity Human, Mouse, Rat Clonality Polyclonal Format Lyophilized Description Rabbit IgG polyclonal antibody for Interferon regulatory factor 8(IRF8) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-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

Calculated MW 48356 MW KDa

Application Details Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization Nucleus.

Tissue Specificity Predominantly expressed in lymphoid tissues. .

Protein Name Interferon regulatory factor 8

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human IRF8(411-426aa ASHQRSFFRENQQITV), different from the related mouse and rat sequences by two amino acids.

Purification



Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the IRF family.

Anti-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.

Anti-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>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-IRF8 Antibody - Images



Anti-IRF8 antibody, ABO11520, Western blottingLane 1: RAJI Cell LysateLane 2: Rat Liver Tissue LysateLane 3: Rat Kidney Tissue Lysate

Anti-IRF8 Antibody - Background

Interferon regulatory factor 8(IRF8) also known as Interferon consensus sequence-binding protein(ICSBP), is a protein that in humans is encoded by the IRF8 gene. By genomic sequence analysis, the IRF8 gene is mapped to chromosome 16q24.1. Interferon consensus sequence-binding protein(ICSBP) is a transcription factor of the interferon(IFN) regulatory factor(IRF) family. 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. IRF8 is a transcription factor that plays critical roles in the regulation of lineage commitment and in myeloid cell maturation including the decision for a common myeloid progenitor(CMP) to differentiate into a monocyte precursor cell.