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Anti-IRF5 Antibody

Catalog # ABO11519

Product Information

Application	WB
Primary Accession	Q13568
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Interferon regulatory factor 5(IRF5) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3663
Other Names	Interferon regulatory factor 5, IRF-5, IRF5
Calculated MW	56044
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm.
Source	Eukaryota
Protein Name	Interferon regulatory factor 5
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 IRF5(456-472aa EQFKELHHIWQSQQRLQ), identical to the related rat sequence, and different from the related mouse sequence 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.

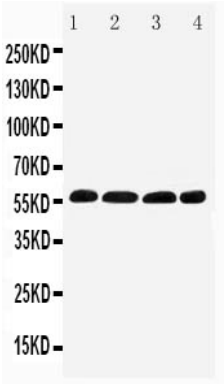
Protein Information

Name	IRF5 {ECO:0000303|PubMed:11303025, ECO:0000312|HGNC:HGNC:6120}
Function	Transcription factor that plays a critical role in innate immunity by activating expression of type I interferon (IFN) IFNA and INFB and inflammatory cytokines downstream of endolysosomal toll-like receptors TLR7, TLR8 and TLR9 (PubMed:11303025, PubMed:15695821, PubMed:22412986, PubMed:25326418, PubMed:32433612, PubMed:40639948). Regulates the transcription of type I IFN genes (IFN-alpha and IFN- beta) and IFN-stimulated genes (ISG) by binding to an interferon- stimulated response element (ISRE) in their promoters (By similarity). Can efficiently activate both the IFN-beta (IFNB) and the IFN-alpha (IFNA) genes and mediate their induction downstream of the TLR- activated, MyD88-dependent pathway (By similarity). Key transcription factor regulating the IFN response during SARS-CoV-2 infection (PubMed:33440148).
Cellular Location	Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm: upon activation by the TLR adapter MYD88 and subsequent phosphorylation, translocates to the nucleus

Background

Interferon regulatory factor 5, also called IRF5 or SLEB10, is a protein that in humans is encoded by the IRF5 gene. IRF5 gene is mapped to 7q32.1. This gene encodes a member of the interferon regulatory factor(IRF) family, a group of transcription factors with diverse roles, including virus-mediated activation of interferon, and modulation of cell growth, differentiation, apoptosis, and immune system activity. Members of the IRF family are characterized by a conserved N-terminal DNA-binding domain containing tryptophan(W) repeats. Multiple transcript variants encoding different isoforms have been found for this gene, and a 30-nt indel polymorphism(SNP rs60344245) can result in loss of a 10-aa segment. This gene is a transcription factor involved in the induction of interferons IFNA and INFB and inflammatory cytokines upon virus infection.

Images



Anti-IRF5 antibody, ABO11519, Western blottingLane 1: Human Placenta Tissue LysateLane 2: Rat Thymus Tissue LysateLane 3: Rat Kidney Tissue LysateLane 4: Rat Ovary Tissue Lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.