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IRF7 Antibody

Rabbit mAb
Catalog # AP90648

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	Q92985
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	IRF7; Interferon regulatory factor 7; IRF-7; IRF7A; IRF-7H;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	54278

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human IRF7
Description	Binds to the Q promoter (Qp) of EBV nuclear antigen 1 a (EBNA1) and may play a role in the regulation of EBV latency. Can activate distinct gene expression programs in macrophages and regulate the anti-tumor properties of primary macrophages.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	IRF7
Function	Key transcriptional regulator of type I interferon (IFN)- dependent immune responses and plays a critical role in the innate immune response against DNA and RNA viruses (PubMed:28342865, PubMed:28768858). 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 (PubMed:17574024, PubMed:32972995). Can efficiently activate both the IFN-beta (IFNB) and the IFN-alpha (IFNA) genes and mediate their induction via both the virus-activated, MyD88-independent pathway and the TLR-activated, MyD88-dependent pathway. Induces transcription of ubiquitin hydrolase USP25 mRNA in response to lipopolysaccharide (LPS) or viral infection in a type I IFN-dependent manner (By similarity). Required during both the early and late phases of the IFN gene induction but is more critical for the late than for the early phase. Exists in an inactive form in the cytoplasm of uninfected cells and following viral infection, double-stranded RNA (dsRNA), or toll-like receptor (TLR) signaling, becomes phosphorylated by

IKBKE and TBK1 kinases. This induces a conformational change, leading to its dimerization and nuclear localization where along with other coactivators it can activate transcription of the type I IFN and ISG genes. Can also play a role in regulating adaptive immune responses by inducing PSMB9/LMP2 expression, either directly or through induction of IRF1. Binds to the Q promoter (Qp) of EBV nuclear antigen 1 a (EBNA1) and may play a role in the regulation of EBV latency. Can activate distinct gene expression programs in macrophages and regulate the anti- tumor properties of primary macrophages (By similarity) (PubMed:11073981, PubMed:12374802, PubMed:15361868, PubMed:17404045).

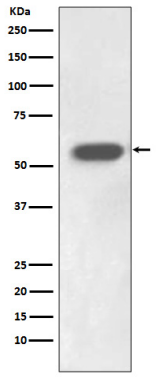
Cellular Location

Nucleus. Cytoplasm. Note=The phosphorylated and active form accumulates selectively in the nucleus

Tissue Location

Expressed predominantly in spleen, thymus and peripheral blood leukocytes

Images



Western blot analysis of IRF7 expression in Jurkat cell lysate.

Image not found : 202311/AP90648-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human pancreas, using IRF7 Antibody.

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