10320 Camino Santa Fe, Suite G
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Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52306

Specification

Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q92985
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**54278**

Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal Antibody - Additional Information

Gene ID 3665

Other Names
IRF7A; IRF7B; IRF7C; IRF7H; IRF-7H; Interferon regulatory factor 7; IRF-7; IRF7

Dilution
WB~~1:100~1:500<br \>IHC-P~~1:100~1:500

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal Antibody - 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

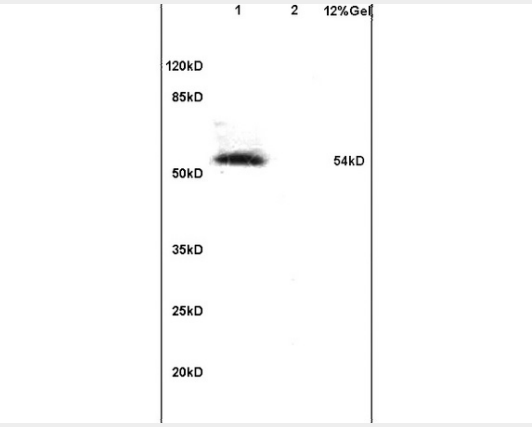
Tissue Location
Expressed predominantly in spleen, thymus and peripheral blood leukocytes

Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal 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

Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal Antibody - Images



Lane 1: mouse embryo lysates Lane 2: mouse brain lysates probed with Anti Phospho-IRF7 (Ser471/472) Polyclonal Antibody, Unconjugated (AP52306) at 1:200 in 4˚C. Followed by conjugation to secondary antibody at 1:3000 90min in 37˚C. Predicted band 54kD. Observed band

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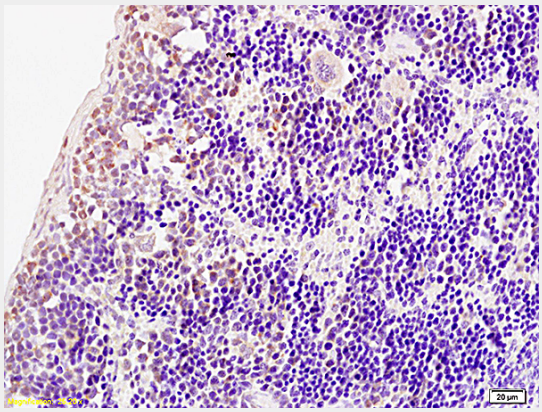
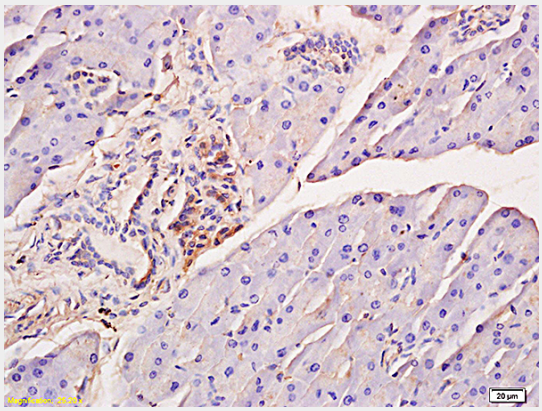
size: 54kD



Formalin-fixed and paraffin embedded rat spleen tissue labeled with Anti-Phospho-IRF7 (Ser471/472) Polyclonal Antibody, Unconjugated (AP52306) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Formalin-fixed and paraffin embedded mouse pancreas tissue labeled with Anti-Phospho-IRF7 (Ser471/472) Polyclonal Antibody, Unconjugated (AP52306) at 1:200 followed by conjugation to the secondary antibody and DAB staining

Rabbit Anti-IRF7 (Ser471 + Ser472) Polyclonal Antibody - Background

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. 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. 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. 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.