

Anti-IRF7 Picoband Antibody
Catalog # ABO10022**Specification**

Anti-IRF7 Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	Q92985
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Interferon regulatory factor 7(IRF7) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

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

Anti-IRF7 Picoband Antibody - Additional Information

Gene ID 3665

Other Names

Interferon regulatory factor 7, IRF-7, IRF7

Calculated MW

54278 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

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

Tissue Specificity

Expressed predominantly in spleen, thymus and peripheral blood leukocytes.

Protein Name

Interferon regulatory factor 7

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human IRF7 (31-67aa QWLDEARTCFRVPWKHFARKDLSEADARIFKAWAVAR), different from the related mouse sequence by seven 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.

Anti-IRF7 Picoband 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

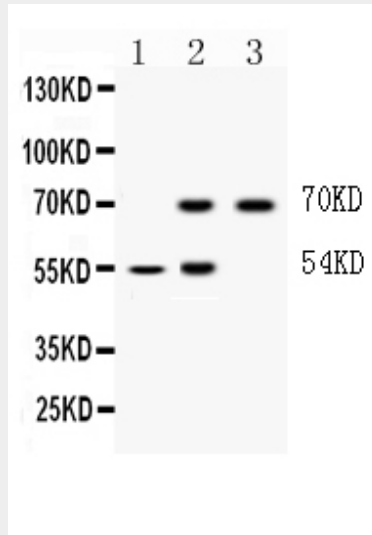
Expressed predominantly in spleen, thymus and peripheral blood leukocytes

Anti-IRF7 Picoband Antibody - Protocols

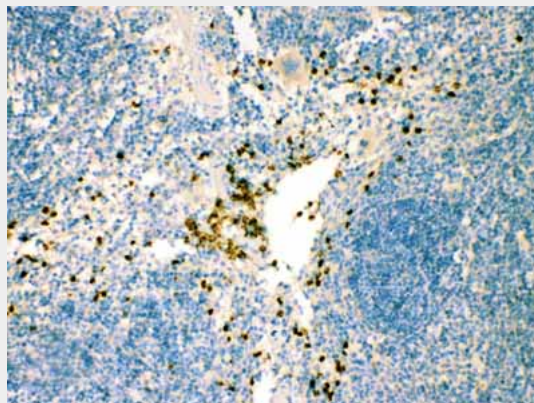
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

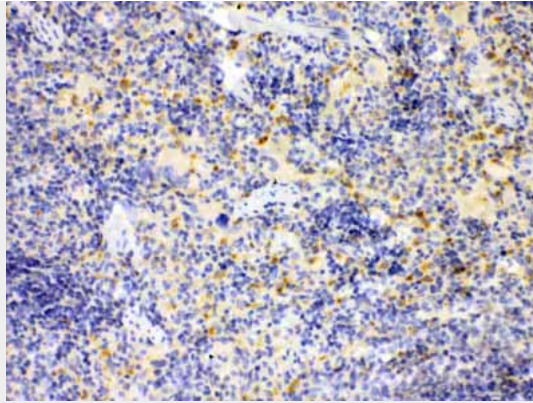
Anti-IRF7 Picoband Antibody - Images



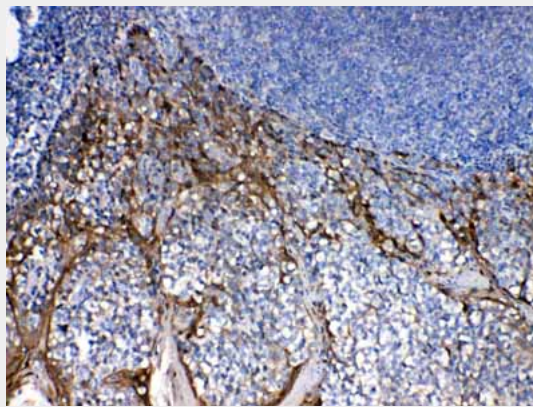
Western blot analysis of IRF7 expression in rat spleen extract (lane 1), mouse spleen extract (lane 2) and K562 whole cell lysates (lane 3). IRF7 at 54KD, 70KD was detected using rabbit anti- IRF7 Antigen Affinity purified polyclonal antibody (Catalog # ABO10022) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .



IRF7 was detected in paraffin-embedded sections of mouse spleen tissues using rabbit anti- IRF7 Antigen Affinity purified polyclonal antibody (Catalog # ABO10022) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



IRF7 was detected in paraffin-embedded sections of rat spleen tissues using rabbit anti- IRF7 Antigen Affinity purified polyclonal antibody (Catalog # ABO10022) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



IRF7 was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti- IRF7 Antigen Affinity purified polyclonal antibody (Catalog # ABO10022) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

Anti-IRF7 Picoband Antibody - Background

Interferon regulatory factor 7, also known as IRF7, is a member of the interferon regulatory factor family of transcription factors. This gene is mapped to 11p15.5. IRF7 has been shown to play a role in the transcriptional activation of virus-inducible cellular genes, including interferon beta chain genes. Inducible expression of IRF7 is largely restricted to lymphoid tissue. Multiple IRF7 transcript variants have been identified, although the functional consequences of these have not yet been established.