

# IRF7

rev. 08/02/16  
Cat#: ET1610-89

**Product Type:** Recombinant rabbit monoclonal IgG, primary antibodies

**Species reactivity:** Human, Mouse, Rat, Zebra fish

**Applications:** WB, ICC/IF, IHC, IP, FC

**Molecular Wt.:** 54 kDa

**Description:** Interferon regulatory factor-1 (IRF-1) and IRF-2 have been identified as novel DNA-binding factors that function as regulators of both type I interferon (interferon- $\alpha$  and  $\beta$ ) and interferon-inducible genes. The two factors are structurally related, particularly in their N-terminal regions, which confer DNA binding specificity. In addition, both bind to the same sequence within the promoters of interferon- $\alpha$  and interferon- $\beta$  genes. IRF-1 functions as an activator of interferon transcription, while IRF-2 binds to the same cis elements and represses IRF-1 action. IRF-1 and IRF-2 have been reported to act in a mutually antagonistic manner in regulating cell growth; overexpression of the repressor IRF-2 leads to cell transformation while concomitant overexpression of IRF-1 causes reversion. IRF-1 and IRF-2 are members of a larger family of DNA binding proteins that includes IRF-3, IRF-4, IRF-5, IRF-6, IRF-7 and IFN consensus sequence-binding protein (ICSBP).

**Immunogen:**

Recombinant protein.

**Positive control:**

Jurkat, Raji, PC-12, HepG2, mouse liver tissue, human tonsil tissue, mouse kidney tissue, human spleen tissue, mouse heart tissue, human kidney tissue.

**Subcellular location:**

Nucleus, Cytoplasm.

**Database links:**

SwissProt: Q92985 (Human) P70434 (Mouse) Unigene: 101159 (Rat)

**Recommended Dilutions:**

**WB:** 1:1,000-1:2,000    **ICC:** 1:100-1:500  
**IHC:** 1:50-1:200        **FC:** 1:50-1:100

**Storage Buffer:**

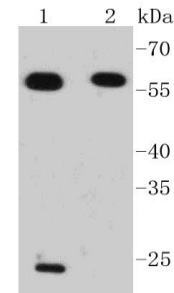
1\*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:**

Store at +4° C after thawing. Aliquot store at -20° C or -80° C. Avoid repeated freeze / thaw cycles.

**Purity:**

ProA affinity purified.

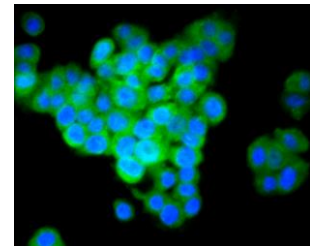


**Fig1:** Western blot analysis of IRF7 on different lysates using anti-IRF7 antibody at 1/1,000 dilution.

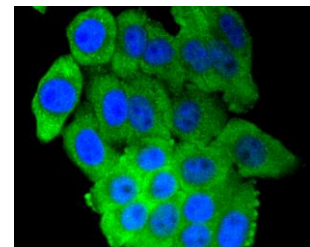
**Positive control:**

**Lane 1: Jurkat**

**Lane 2: Raji**



**Fig2:** ICC staining IRF7 in PC-12 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



**Fig3:** ICC staining IRF7 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

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Support: 0086-571-89986345

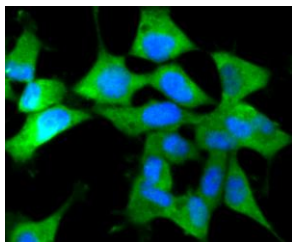
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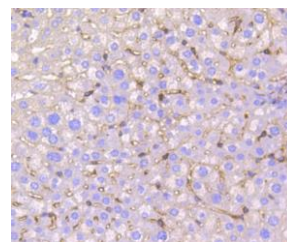


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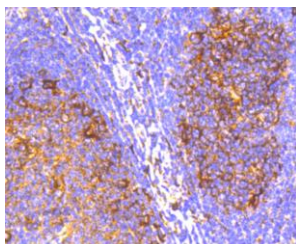
Applications: WB=Western blot IP=Immunoprecipitation IHC=Immunohistochemistry IF=Immunofluorescence FC=Flow cytometry  
Species Cross-Reactivity: H=human M=mouse R=rat Hm=hamster Mk=monkey Mi=mink C=chicken Dm=D.melanogaster X=Xenopus Z=zebrafish  
B=bovine Dg=dog Pg=pig Sc=S.



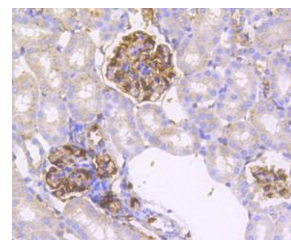
**Fig4:** ICC staining IRF7 in 293 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



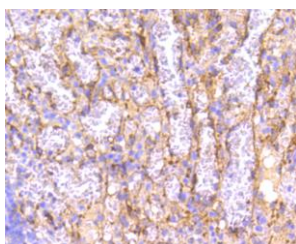
**Fig8:** Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-IRF7 antibody. Counter stained with hematoxylin.



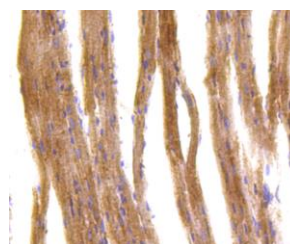
**Fig5:** Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-IRF7 antibody. Counter stained with hematoxylin.



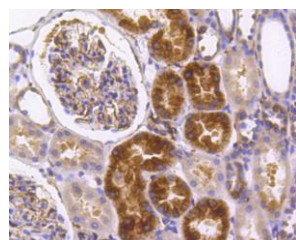
**Fig9:** Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-IRF7 antibody. Counter stained with hematoxylin.



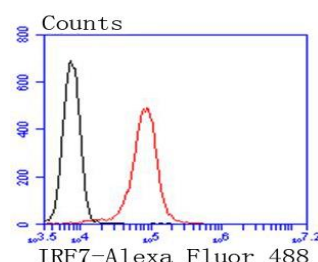
**Fig6:** Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-IRF7 antibody. Counter stained with hematoxylin.



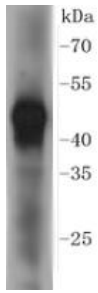
**Fig10:** Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-IRF7 antibody. Counter stained with hematoxylin.



**Fig7:** Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-IRF7 antibody. Counter stained with hematoxylin.



**Fig11:** Flow cytometric analysis of Jurkat cells with IRF7 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.



**Fig12:** Western blot analysis of IRF7 on zebrafish tissue lysates using anti-IRF7 antibody.

### Background References

1. Zhang Y et al. Hantaan virus infection induces CXCL10 expression through TLR3, RIG-I, and MDA-5 pathways correlated with the disease severity. *Mediators Inflamm* 2014:697837 (2014).
2. de Verteuil DA et al. Immunoproteasomes shape the transcriptome and regulate the function of dendritic cells. *J Immunol* 193:1121-32 (2014).

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Species Cross-Reactivity: H=human M=mouse R=rat Hm=hamster Mk=monkey Mi=mink C=chicken Dm=D.melanogaster X=Xenopus Z=zebrafish  
B=bovine Dg=dog Pg=pig Sc=S.