

Product datasheet for **TA327312**

IRF3 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, IP, WB
Recommended Dilution:	WB 1:500 - 1:2000;IHC 1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human IRF3
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	49 kDa
Gene Name:	interferon regulatory factor 3
Database Link:	NP_001562 Entrez Gene 54131 MouseEntrez Gene 292892 RatEntrez Gene 3661 Human Q14653



[View online »](#)

Background:

Interferon regulatory factors (IRFs) comprise a family of transcription factors that function within the Jak/Stat pathway to regulate interferon (IFN) and IFN-inducible gene expression in response to viral infection. IRFs play an important role in pathogen defense, autoimmunity, lymphocyte development, cell growth, and susceptibility to transformation. The IRF family includes nine members: IRF-1, IRF-2, ISGF3 γ /p48, IRF-3, IRF-4 (Pip/LSIRF/ICSAT), IRF-5, IRF-6, IRF-7, and IRF-8/ICSBP. All IRF proteins share homology in their amino-terminal DNA-binding domains. IRF family members regulate transcription through interactions with proteins that share similar DNA-binding motifs, such as IFN-stimulated response elements (ISRE), IFN consensus sequences (ICS), and IFN regulatory elements (IRF-E). IRF-3 can inhibit cell growth and plays a critical role in controlling the expression of genes in the innate immune response. In unstimulated cells, IRF-3 is present in the cytoplasm. Viral infection results in phosphorylation of IRF-3 and leads to its translocation to the nucleus where it activates promoters containing IRF-3-binding sites. Phosphorylation of IRF-3 occurs at a cluster of C-terminal Ser and Thr residues (between 385 and 405), leading to its association with the p300/CBP coactivator protein that promotes DNA binding and transcriptional activity. During infection, IRF-3 is likely activated through a pathway that includes activation of Toll-like receptors and a kinase complex that includes IKK ϵ and TBK1. IRF-3 is phosphorylated at Ser396 following viral infection, expression of viral nucleocapsid, and double-stranded RNA treatment. These events likely play a role in activation of IRF-3.

Synonyms:

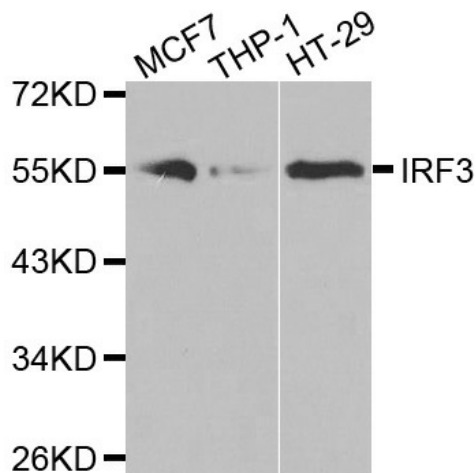
interferon regulatory factor 3; MGC94729

Protein Families:

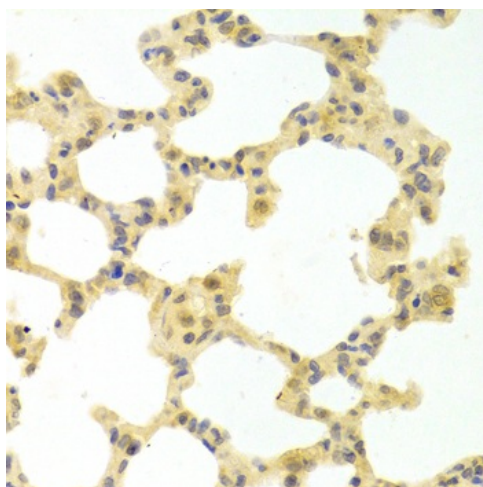
Druggable Genome, Transcription Factors

Protein Pathways:

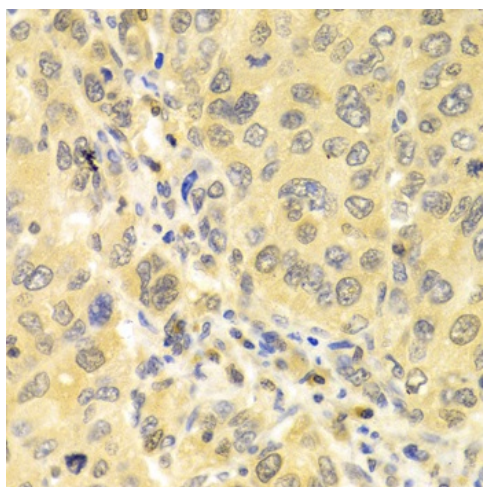
Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway

Product images:

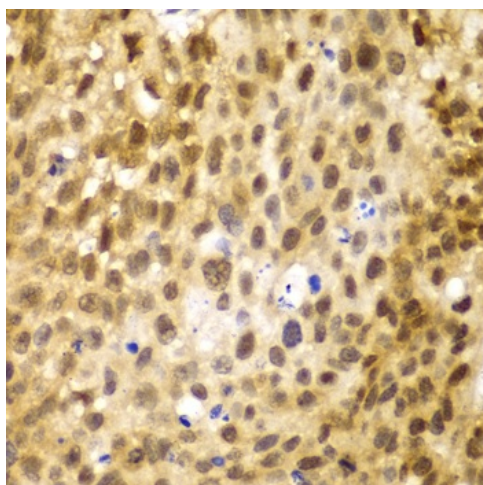
Western blot analysis of extracts of various cell lines, using IRF3 antibody.



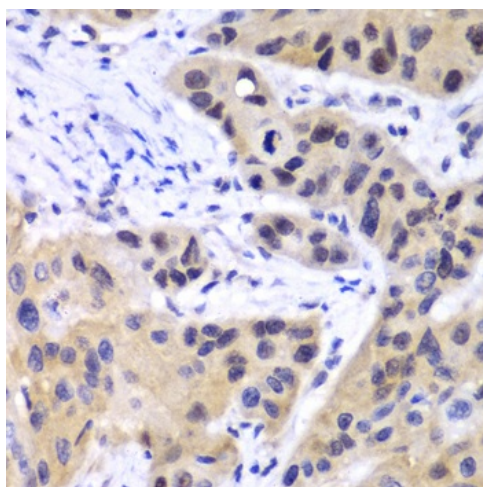
Immunohistochemistry of paraffin-embedded rat lung using IRF3 antibody at dilution of 1:100 (x400 lens).



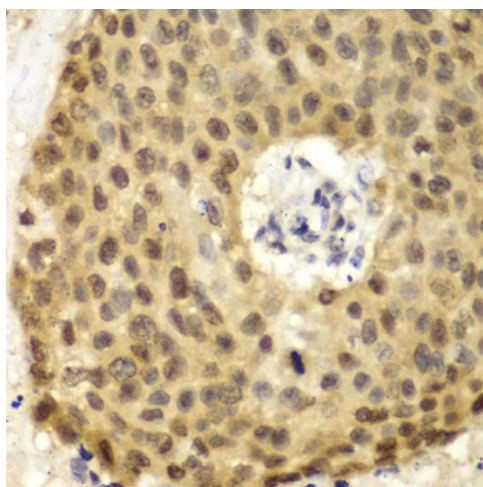
Immunohistochemistry of paraffin-embedded human liver cancer using IRF3 antibody at dilution of 1:100 (x400 lens).



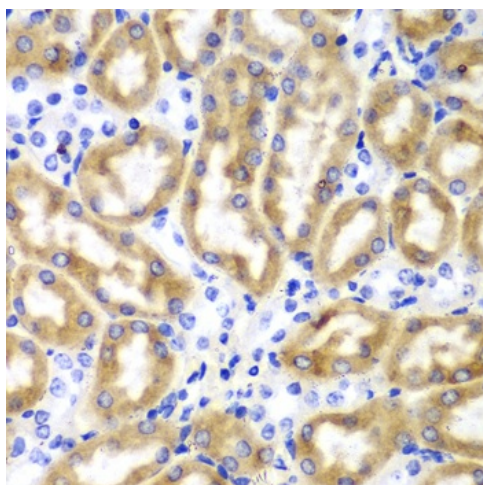
Immunohistochemistry of paraffin-embedded human lung cancer using IRF3 antibody at dilution of 1:100 (400x lens).



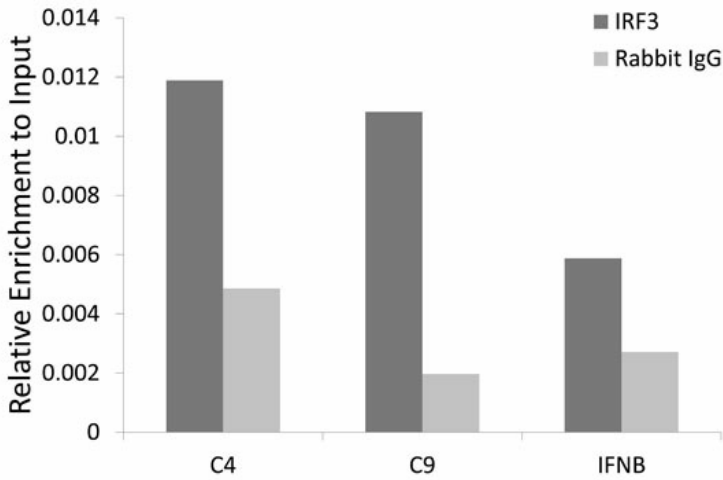
Immunohistochemistry of paraffin-embedded human esophageal cancer using IRF3 antibody at dilution of 1:100 (400x lens).



Immunohistochemistry of paraffin-embedded human lung cancer using IRF3 antibody at dilution of 1:100 (400x lens).



Immunohistochemistry of paraffin-embedded mouse kidney using IRF3 antibody at dilution of 1:100 (400x lens).



Chromatin immunoprecipitation analysis extracts of HCT116 cell line, using IRF3 rabbit polyclonal antibody and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.