E92172

IRF3Polyclonal Antibody

Catalog Number: E92172
Amount: 100ul
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 (1). 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, ISGF3γ/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) (2). IRF-3 can inhibit cell growth and plays a critical role in controlling the expression of genes in the innate immune response (1-4). 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 (5). During infection, IRF-3 is likely activated through a pathway that includes activation of Toll-like receptors and a kinase complex that includes IKKε and TBK1 (6,7). 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 (8).
Species: Rabbit
Isotype: IgG
Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms: IRF-3; IRF3;
Immunogen: Recombinant proteinof human IRF3
Purification: Affinity purification
Reactivity: H M R
Applications: WB IHC
Molecular Weight: 49kDa
Swiss-Prot No. : Q14653
Gene ID: 3661
References: 1. Taniguchi, T. et al. (2001) Annu Rev Immunol 19, 623-55. 2. Honda, K. and Taniguchi, T. (2006) Nat Rev Immunol 6, 644-58. 3. Hiscott, J. et al. (1999) J Interferon Cytokine Res 19, 1-13. 4. Kim, T.Y. et al. (2003) J Biol Chem 278, 15272-8. 5. Yoneyama, M. et al. (2002) J Interferon Cytokine Res 22, 73-6. 6. Fitzgerald, K.A. et al. (2003) Nat Immunol 4, 491-6. 7. Kopp, E. and Medzhitov, R. (2003) Curr Opin Immunol 15, 396-401. 8. Servant, M.J. et al. (2003) J Biol Chem 278, 9441-7.

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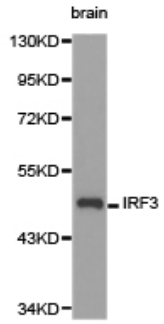
WB 1:500 - 1:2000

IHC 1:50- 1:200



Western blot analysis of extracts of braincell lines, using IRF3 antibody.

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