

Code No. 18781

**Anti-Human
IRF-3 (Interferon Regulatory Factor-3) Rabbit IgG Affinity Purify**Volume : 100 µg

Introduction : Interferon Regulatory Factor-3 (IRF-3) is the gene coding for a regulatory factor that mediates the action of IL-1, TNF α and LPS. It is reported that IRF-3 controls the production of interferons and chemokines in virus infected cells, by a posttranslational mechanism that involves virus induced phosphorylation, protein dimerization, cytoplasmic to nuclear translocation and stimulation of responsive genes. Furthermore, it is reported that the chemokine RANTES, an important physiological inhibitor of HIV replication, is controlled by IRF-3 activation.

IRF-3 is ubiquitously expressed in its inactive form in the cytoplasm. Viral infection induces phosphorylation of the Ser 386 in IRF-3 by IRF-3 kinase (IKK-i/ ϵ , TBK-1). This phosphorylation induces dimerization of IRF-3 and association with the coactivators CBP/p300, and the complex activates the target genes in the nucleus.

Antigen : Synthetic peptide for a.a.137 - a.a.150 of Human IRF-3
(EDILDELLGNMVL A)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 - 8 °C
: Solution, 2 years at -20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues by several techniques such as Avidin Biotin Complex (ABC) Method. The optimal concentration is about 1-5 µg/mL, however, the concentration should be optimized by each laboratory.

: This antibody can be used for western blotting in concentration of 1-5 µg /mL.

: This antibody can be used for immuno-precipitation in concentration of about 1-5 µg /test.

Specificity : Confirmed by western blotting.

Reference : 1. Iwamura T, Yoneyama M, Yamaguchi K, Suhara W, Mori W, Shiota K, Okabe Y, Namiki H, Fujita T. Induction of IRF-3/-7 kinase and NF-kappaB in response to double-stranded RNA and virus infection: common and unique pathways. *Genes Cells*. 2001 Apr; 6 (4): 375-88.
2. Suhara W, Yoneyama M, Iwamura T, Yoshimura S, Tamura K, Namiki H, Aimoto S, Fujita T. Analyses of virus-induced homomeric and heteromeric protein associations between IRF-3 and coactivator CBP/p300. *J Biochem (Tokyo)*. 2000 Aug; 128 (2): 301-7.
3. Mori M, Yoneyama M, Ito T, Takahashi K, Inagaki F, Fujita T. Identification of Ser-386 of interferon regulatory factor 3 as critical target for inducible phosphorylation that determines activation. *J Biol Chem*. 2004 Mar 12;279(11):9698-702.

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