

# Polyclonal Anti-IRF3 Antibody

Catalog Number: PA1819

## Description

<b>Gene Name</b>	interferon regulatory factor 3
<b>Recommended Protein Name</b>	Interferon regulatory factor 3
<b>Lot No.</b>	0181212c021987
<b>Size</b>	100µg/vial
<b>Form</b>	lyophilized
<b>Ig type</b>	Rabbit IgG
<b>Specificity</b>	No cross reactivity with other proteins.
<b>Purification</b>	Immunogen affinity purified.
<b>Species</b>	<b>Reacts with:</b> human
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human IRF3(409-427aa KAYLQDLVEGMDFQGPGES), different from the related mouse and rat sequences by five amino acids.
<b>Contents</b>	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg NaN <sub>3</sub> .

## Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu	-	-

**Tested Species:** In-house tested species with positive results.

**Predicted Species:** Species predicted to be fit for the product based on sequence similarities.

*Other applications have not been tested.*

*Optimal dilutions should be determined by end users.*

## Preparation and storage

**Reconstitution:** 0.2ml of distilled water will yield a concentration of 500µg/ml.

**Storage:** At -20°C for one year. After reconstitution, 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.

## Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

## Background

IRF3(interferon regulatory factor 3) is a member of the interferon regulatory transcription factor (IRF) family. The IRF3 gene is mapped on 19q13.33. IRF3 is found in an inactive cytoplasmic form that upon serine/threonine phosphorylation forms a complex with CREBBP. IRF3 plays an important role in the innate immune system's response to viral infection. Aggregated MAVS have been found to activate IRF3 dimerization. Although IRF3 increased transcriptional activity from an ISRE-containing promoter, expression of IRF3 as a Gal4 fusion protein did not activate expression of a chloramphenicol acetyltransferase (CAT) reporter gene containing repeats of the Gal4-binding sites. Translocation of IRF3 was accompanied by an increase in serine and threonine phosphorylation. The transcriptional activators CREBBP and EP300 coimmunoprecipitated with IRF3 only subsequent to viral infection, and the authors stated that these are also subunits of DRAF1.

## Reference

1. Bellingham, J., Gregory-Evans, K., Gregory-Evans, C. Y. Mapping of human interferon regulatory factor 3 (IRF3) to chromosome 19q13.3-13.4 by an intragenic polymorphic marker. *Ann. Hum. Genet.* 62: 231-234, 1998.
2. Doyle, S. E., Vaidya, S. A., O'Connell, R., Dadgostar, H., Dempsey, P. W., Wu, T.-T., Rao, G., Sun, R., Haberland, M. E., Modlin, R. L., Cheng, G. IRF3 mediates a TLR3/TLR4-specific antiviral gene program. *Immunity* 17: 251-263, 2002.
3. Stetson, D. B., Medzhitov, R. Recognition of cytosolic DNA activates an IRF3-dependent innate immune response. *Immunity* 24: 93-103, 2006.