Product Name: IRF-3 Rabbit Polyclonal Antibody
Catalog #: APRab12743
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	48-55kDa

Antigen Information

Gene Name	IRF3
Alternative Names	IRF3; Interferon regulatory factor 3; IRF-3
Gene ID	3661.0
SwissProt ID	Q14653
Immunogen	The antiserum was produced against synthesized peptide derived from human IRF3. AA range:362-411

Background

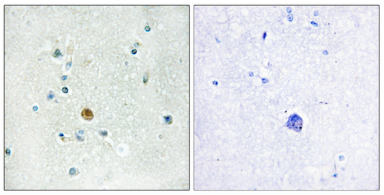
This gene encodes a member of the interferon regulatory transcription factor (IRF) family. The encoded protein is found in an

inactive cytoplasmic form that upon serine/threonine phosphorylation forms a complex with CREBBP. This complex translocates to the nucleus and activates the transcription of interferons alpha and beta, as well as other interferon-induced genes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011],function:Mediates interferon-stimulated response element (ISRE) promoter activation. Functions as a molecular switch for antiviral activity. DsRNA generated during the course of an viral infection leads to IRF3 phosphorylation on the C-terminal serine/threonine cluster. This induces a conformational change, leading to its dimerization, nuclear localization and association with CREB binding protein (CREBBP) to form dsRNA-activated factor 1 (DRAF1), a complex which activates the transcription of genes under the control of ISRE. The complex binds to the IE and PRDIII regions on the IFN-alpha and IFN-beta promoters respectively. IRF-3 does not have any transcription activation domains.,PTM:Constitutively phosphorylated on many serines residues. C-terminal serine/threonine cluster is phosphorylated in response of induction by IKBKE and TBK1. Ser-385 and Ser-386 may be specifically phosphorylated in response to induction. An alternate model propose that the five serine/threonine residues between 396 and 405 are phosphorylated in response to a viral infection. Phosphorylation, and subsequent activation of IRF3 is inhibited by vaccinia virus protein E3.,similarity:Belongs to the IRF family.,similarity:Contains 1 tryptophan pentad repeat DNA-binding domain.,subcellular location:Shuttles between cytoplasmic and nuclear compartments, with export being the prevailing effect. When activated, IRF3 interaction with CREBBP prevents its export to the cytoplasm.,subunit:Homodimer; phosphorylation-induced. Interacts with CREBBP. May interact with MAVS. Interacts with IKBKE and TBK1. Interacts with TICAM1 and TICAM2. Interacts with rotavirus A NSP1 (via C-terminus); this interaction leads to the proteasome-dependent degradation of IRF3.,tissue specificity:Expressed constitutively in a variety of tissues.,

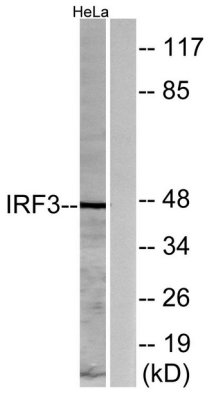
Research Area

Toll_Like;RIG-I-like receptor;Cytosolic DNA-sensing pathway;

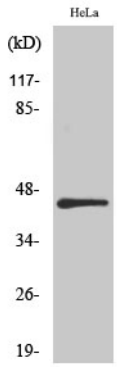
Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using IRF3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using IRF3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using IRF-3 Polyclonal Antibody diluted at 1: 500