

#3257 Store at -20°C

IRF-5 Antibody

✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
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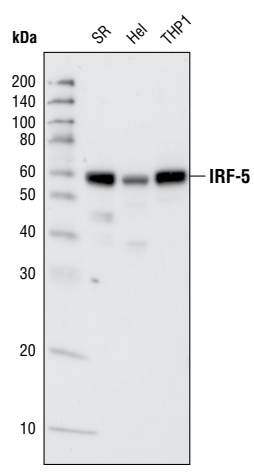
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #3663
Swiss-Prot Acc. #Q13568

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IF-IC Endogenous	H	60 kDa	Rabbit**

Background: Interferon regulatory factors (IRFs) comprise a family of transcription factors that function with the Jak/Stat pathway to regulate interferon (IFN) and IFN-inducible gene expression in response to viral infection (1,2). IRFs play an important role in the 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, which 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-5 is expressed in lymphoid tissues and peripheral blood lymphocytes and participates in the induction of type I interferon genes following viral infection (3). Activation of IRF-5 signaling is triggered by the toll-like receptor (TLR) pathway, including TLR7 and MyD88 (4,5). Genetic variants of IRF-5 have been associated with disorders where the IFN pathway is abnormally activated, such as systemic lupus erythematosus (6,7).



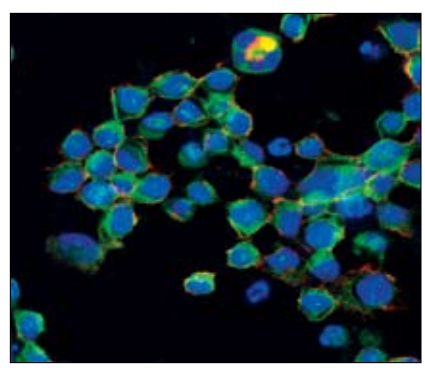
Western blot analysis of extracts from SR, Hel and THP-1 cell lines using IRF-5 Antibody.

Specificity/Sensitivity: IRF-5 Antibody detects endogenous levels of total IRF-5 protein.

Source/Purification: Polyclonal antibodies were prepared by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues near the carboxyl terminus of human IRF-5 protein. Antibodies were purified by protein A and peptide affinity chromatography.

Background References:

- (1) Taniguchi, T. et al. (2001) *Annu. Rev. Immunol.* 19, 623-655.
- (2) Mamane, Y. et al. (1999) *Gene* 237, 1-14.
- (3) Barnes, B.J. et al. (2001) *J. Biol. Chem.* 276, 23382-23390.
- (4) Takaoka, A. et al. (2005) *Nature* 434, 243-249.
- (5) Schoenemeyer, A. et al. (2005) *J. Biol. Chem.* 280, 17005-17012.
- (6) Sigurdsson, S. et al. (2005) *Am. J. Hum. Genet.* 76, 528-537.
- (7) Graham, G. et al. (2006) *Nat. Genet.* 38, 550-555.



Confocal immunofluorescent analysis of THP-1 cells using IRF-5 Antibody (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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