

IRF-6 Antibody

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 02/16/16

For Research Use Only. Not For Use In Diagnostic Procedures.

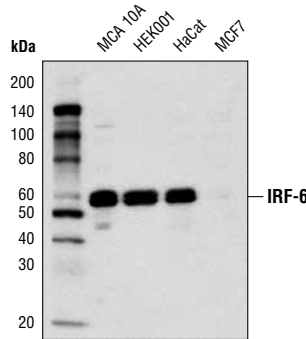
Applications W, IP Endogenous	Species Cross-Reactivity* H, (Mk, B, Dg)	Molecular Wt. 58,60 kDa	Source Rabbit**
-------------------------------------	---	----------------------------	--------------------

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).

While IRF family members generally function in innate immune responses, IRF-6 has not been associated in that role. Original studies of IRF-6 found that mutation of the gene for IRF-6 caused Van der Woude Syndrome, an autosomal dominant disorder resulting in mouth abnormalities including cleft lip and palate (3). IRF-6 knockouts show a hyperproliferative epidermis that fails to undergo keratinocyte differentiation (4). IRF-6 has also been found to interact with the mammary tumor suppressor maspin, and like maspin is expressed in normal mammary epithelial but reduced or absent in breast carcinoma (5). Cellular proliferation may promote IRF-6 phosphorylation leading to its proteasomal dependent degradation (6).

Specificity/Sensitivity: IRF-6 Antibody recognizes endogenous levels of total IRF-6 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly121 of human IRF-6 protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell lines using IRF-6 Antibody. Absence of IRF-6 in MCF7 cells has been reported previously (5). Doublet has been reported to result from phosphorylation (6).

Entrez-Gene ID #3664
Swiss-Prot Acc. #O14896

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	1:100

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.

Background 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) Kondo, S. et al. (2002) *Nat Genet* 32, 285-9.
- (4) Richardson, R.J. et al. (2006) *Nat Genet* 38, 1329-34.
- (5) Bailey, C.M. et al. (2005) *J Biol Chem* 280, 34210-7.
- (6) Bailey, C.M. et al. (2008) *Mol Cell Biol* 28, 2235-43.

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.