

#5112 Store at **-20°C**

Phospho-ATF-2 (Thr71) (11G2) Rabbit mAb

- Small 100 µl (10 western blots)
- Large 300 µl (30 western blots)



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rev. 05/17/10

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.

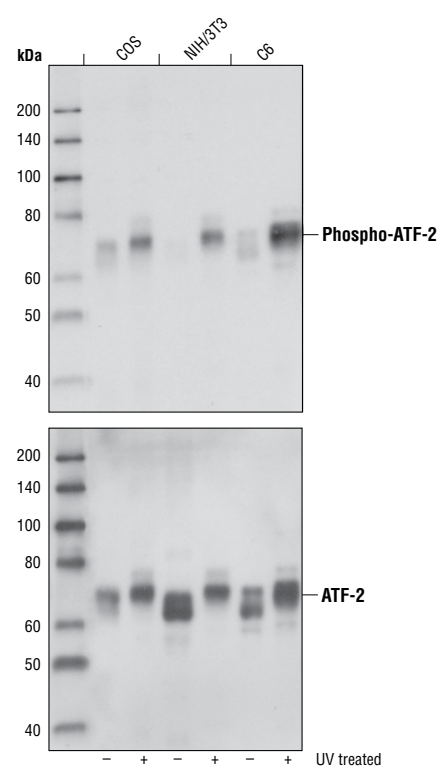
Entrez-Gene ID #1386
Swiss-Prot Acc. #P15336

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, F Endogenous	H, M, R, Mk	70 kDa	Rabbit IgG**

Background: The transcription factor ATF-2 (also called CRE-BP1) binds to both AP-1 and CRE DNA response elements and is a member of the ATF/CREB family of leucine zipper proteins (1). ATF-2 interacts with a variety of viral oncoproteins and cellular tumor suppressors and is a target of the SAPK/JNK and p38 MAP kinase signaling pathways (2-4). Various forms of cellular stress, including genotoxic agents, inflammatory cytokines and UV irradiation, stimulate the transcriptional activity of ATF-2. Cellular stress activates ATF-2 by phosphorylation of Thr69 and Thr71 (2-4). Both SAPK and p38 MAPK have been shown to phosphorylate ATF-2 at these sites *in vitro* and in cells transfected with ATF-2. Mutations of these sites result in the loss of stress-induced transcription by ATF-2 (2-4). In addition, mutations at these sites reduce the ability of E1A and Rb to stimulate gene expression via ATF-2 (2).

Specificity/Sensitivity: Phospho-ATF-2 (Thr71) (11G2) Rabbit mAb detects endogenous levels of ATF-2 only when phosphorylated at threonine 71. This antibody does not cross-react with phosphorylated c-Jun, CREB or other transcription factors. It recognizes both Thr69/Thr71 dually phosphorylated ATF-2 and Thr71 singly phosphorylated ATF-2 equally well.

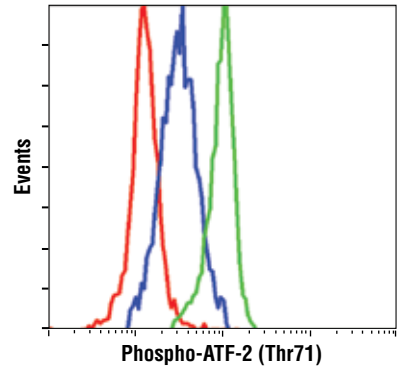
Source/Purification: Monoclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide (KLH-coupled) corresponding to residues surrounding Thr71 of human ATF2.



Western blot analysis of extracts from untreated or UV-treated COS cells, NIH/3T3 cells and C6 cells, using Phospho-ATF-2 (Thr71) (11G2) Rabbit mAb (upper), or ATF-2 (20F1) Rabbit mAb #9226 (lower).

Background References:

- (1) Abdel-Hafiz, H.A. et al. (1992) *Mol. Endocrinol.* 6, 2079–2089.
- (2) Gupta, S. et al. (1995) *Science* 267, 389–393.
- (3) van Dam, H. et al. (1995) *EMBO J.* 14, 1798–1811.
- (4) Livingstone, C. et al. (1995) *EMBO J.* 14, 1785–1797.



Flow cytometric analysis of THP-1 cells, untreated (blue) or Anisomycin treated (green), using Phospho-ATF-2 (Thr71) (11G2) Rabbit mAb compared to a nonspecific negative control antibody (red).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. 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
Flow Cytometry	1:400

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.

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.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.