

**#1040** Store at -20°C

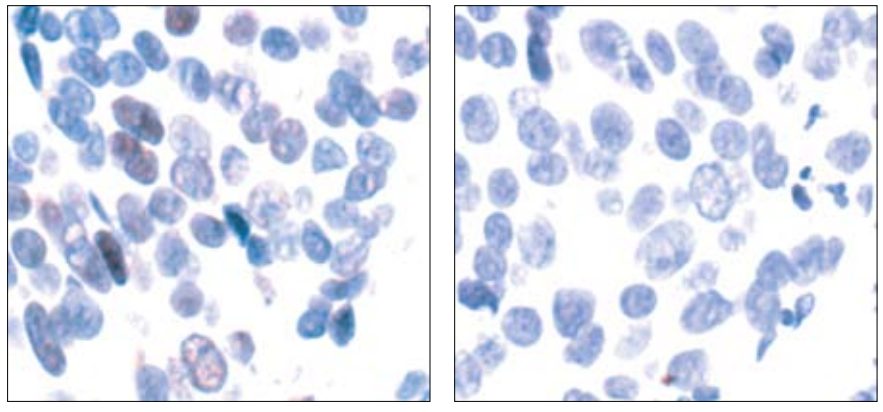
# Phospho-ATF-2 (Thr69/71) Blocking Peptide

100 µg  
 (10 Western mini-blot)

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

rev. 07/12/06

This product is for *in vitro* research use only and is not intended for use in humans or animals.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using Phospho-ATF-2 (Thr69/71) Antibody #9225 preincubated with irrelevant control peptide (left) and Phospho-ATF-2 (Thr69/71) Blocking Peptide (right).

**Description:** This peptide is used to block Phospho-ATF-2 (Thr69/71) Antibody #9225 reactivity.

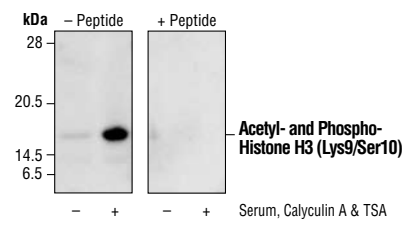
**Background:** The transcription factor ATF-2 (also called CRE-BP1) binds to both AP-1 and CRE DNA response elements and is a member of the ATF/CREB family of leucine zipper proteins (1). ATF-2 interacts with a variety of viral oncoproteins and cellular tumor suppressors and is a target of the SAPK/JNK 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).

**Quality Control:** The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Phospho-ATF-2 (Thr69/71) Antibody #9225 by immunohistochemistry and Western Blotting.

**Applications:** Use as a blocking reagent to evaluate the specificity of antibody reactivity in immunohistochemistry and Western blot protocols.

**Directions for Use:** For immunohistochemistry, add twice the volume of peptide as volume of antibody used in 100 µl total volume. Incubate for a minimum of 30 minutes prior to adding the entire volume to the slide. Recommended antibody dilutions can be found on the relevant product data sheet.

For Western immunoblotting, add 10 µl of antibody and 10 µl of blocking peptide to 10 ml of antibody dilution buffer, and incubate at room temperature for 30 minutes before allowing to react with the blot.



Western blot analysis of extracts from NIH/3T3 cells, untreated or treated with UV light, using Phospho-ATF-2 (Thr69/71) Antibody #9225 (left) or the same antibody incubated with specific blocking peptide (right).

**Storage:** Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. Store at -20°C.

**Companion Products:**  
 Phospho-ATF-2 (Thr69/71) Antibody #9225

**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.

