#1020 Store at –20°C

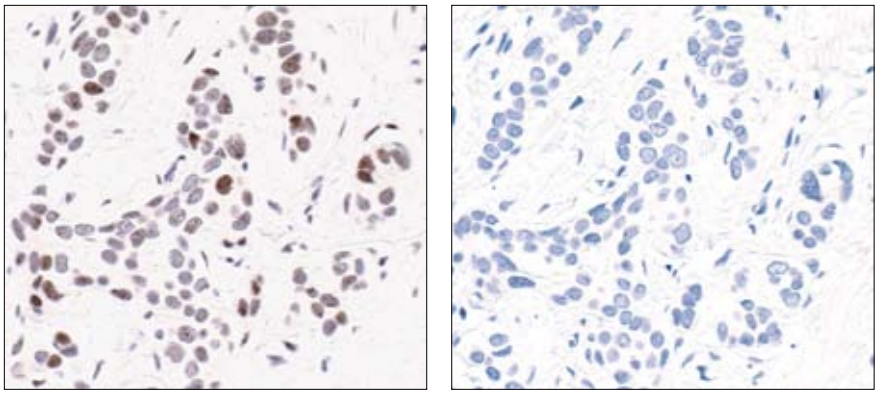
Phospho-c-Jun (Ser63) II Blocking Peptide

☑ 100 µg
(10 Western mini-blots)

Cell Signaling TECHNOLOGY®

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

rev. 11/07/08



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Phospho-c-Jun (Ser63) (54B3) Rabbit mAb in the presence of control peptide (left) or Phospho-c-Jun (Ser63) II Blocking Peptide (#1020) (right).

Description: This peptide is used to block Phospho-c-Jun (Ser63) (54B3) Rabbit mAb #2361 reactivity. This peptide will also block Phospho-c-Jun (Ser63) II Antibody #9261 reactivity by Western.

Background: c-Jun is a member of the Jun Family composed of c-Jun, JunB and JunD, and is a component of the transcription factor AP-1. AP-1 is composed dimers of Fos, Jun and ATF family members, and binds and activates transcription at TRE/AP-1 elements (Reviewed in 1).

Extracellular signals including growth factors, chemokines and extracellualar stress activate AP-1-dependent transcription. The transcriptional activity of c-Jun is regulated by phosphorylation at Ser63 and Ser73 through SAPK/JNK (reviewed in 2). Knock-out studies in mice have shown that c-Jun is essential for embryogenesis (3), and subsequent studies have demonstrated roles for c-Jun in various tissues and developmental processes including axon regeneration (4), liver regeneration (5) and T cell development (6).

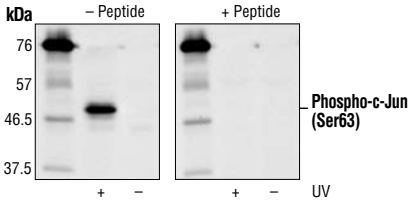
AP-1 regulated genes exert diverse biological functions including cell proliferation, differentiation, and apoptosis, as well as transformation, invasion and metastasis, depending on cell type and the context of the cell (7-9). Other target genes regulate survival as well as hypoxia and angiogenesis (8,10). c-Jun has emerged as promising therapeutic target for cancer, vascular remodeling, acute inflammation, as well as rheumatoid arthritis (11-13).

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Phospho-c-Jun (Ser63) (54B3) Rabbit mAb #2361 by immunohistochemistry and Western blotting. The peptide also blocks Phospho-c-Jun (Ser63) II Antibody #9261 by 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 ul 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-c-Jun (Ser63) II Antibody #9261 (left) or the same antibody preincubated with antigen-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-c-Jun (Ser63) (54B3) Rabbit mAb #2361

Phospho-c-Jun (Ser63) II Antibody #9261

Anti-rabbit IgG, HRP-linked Antibody #7074

Prestained Protein Marker, Broad Range (Premixed Format) #7720

Biotinylated Protein Ladder Detection Pack #7727

20X LumiGLO® Reagent and 20X Peroxide #7003

Background References:

(1) Jochum, W. et al. (2001) *Oncogene* 20, 2401–12.

(2) Davis, R.J. (2000) *Cell* 103, 239–52.

(3) Hilberg, F. et al. (1993) *Nature* 365, 179–81.

(4) Raivich, G. et al. (2004) *Neuron* 43, 57–67.

(5) Behrens, A. et al. (2002) *EMBO J* 21, 1782–90.

(6) Riera-Sans, L. and Behrens, A. (2007) *J Immunol* 178, 5690–700.

(7) Leppä, S. and Bohmann, D. (1999) *Oncogene* 18, 6158–62.

(8) Shaulian, E. and Karin, M. (2002) *Nat Cell Biol* 4, E131–6.

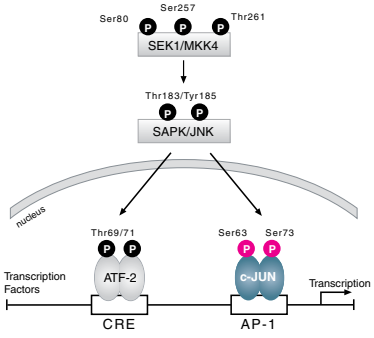
(9) Weiss, C. and Bohmann, D. (2004) *Cell Cycle* 3, 111–3.

(10) Karamouzis, M.V. et al. (2007) *Mol Cancer Res* 5, 109–20.

(11) Kim, S. and Iwao, H. (2003) *J Pharmacol Sci* 91, 177–81.

(12) Weiss, C. and Bohmann, D. (2004) *Cell Cycle* 3, 111–3.

(13) Dass, C.R. and Choong, P.F. (2008) *Pharmazie* 63, 411–4.



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 **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.