

#9261 Store at -20°C

Phospho-c-Jun (Ser63) II Antibody

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

Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
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This product is for *in vitro* research use only and is not intended for use in humans or animals. This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IF-IC, F Endogenous	H, M, R, Mk	48 kDa	Rabbit**

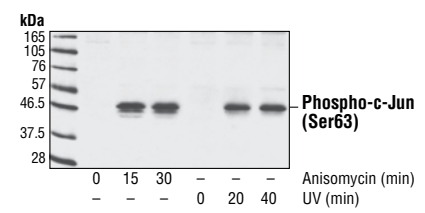
Background: c-Jun is a member of the Jun Family composed of c-Jun, JunB and JunD, and is a component of the transcription factor AP-1. AP-1 is composed dimers of Fos, Jun and ATF family members, and binds and activates transcription at TRE/AP-1 elements (Reviewed in 1).

Extracellular signals including growth factors, chemokines and extracellular 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).

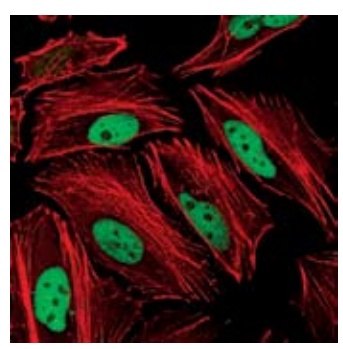
AP-1 regulated genes exert diverse biological functions including cell proliferation, differentiation, and apoptosis, as well as transformation, invasion and metastasis, depending on cell type and the context of the cell (7-9). Other target genes regulate survival as well as hypoxia and angiogenesis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

Specificity/Sensitivity: Phospho-c-Jun (Ser63) II Antibody detects endogenous levels of c-Jun only when phosphorylated at Ser63. This antibody does not recognize the phosphorylated forms of JunD or JunB.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide (KLH-coupled) corresponding to residues around Ser63 of human c-Jun. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from anisomycin or UV-treated NIH/3T3 cells, using Phospho-c-Jun (Ser63) II Antibody.



Confocal immunofluorescent analysis of HeLa cells, anisomycin-treated (upper) or untreated (lower) using Phospho-c-Jun (Ser63) II Antibody (green). Actin filaments have been labeled with DY-554 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Entrez-Gene ID #3725
Swiss-Prot Acc. # P05412

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.**

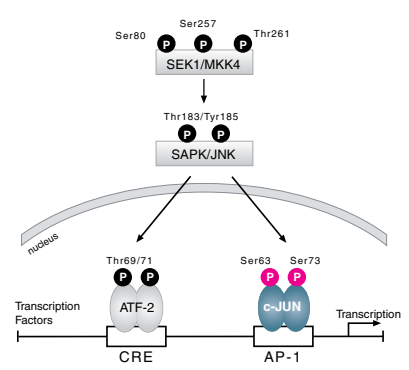
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western Blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:100
Flow Cytometry	1:100

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

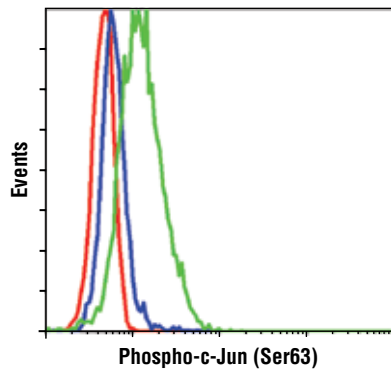
Please visit www.cellsignal.com for a complete listing of recommended companion products.



DRAQ5® is a registered trademark of Biostatus Limited.

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.

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% sequence homology.



Flow cytometric analysis of Jurkat cells, untreated (blue) or Anisomycin-treated (green), using Phospho-c-Jun (Ser63) II Antibody compared to a nonspecific negative control antibody (red).

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.