

#5464 Store at -20C

Phospho-c-Jun (Ser63) (54B3) Rabbit mAb (Biotinylated)



Cell Signaling
TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: WB	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 48	Source/Isotype: Rabbit IgG	UniProt ID: #P05412	Entrez-Gene Id: 3725
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Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. Do not aliquot the antibodies.	
Specificity / Sensitivity	Phospho-c-Jun (Ser63) (54B3) Rabbit mAb (Biotinylated) detects endogenous levels of c-Jun only when phosphorylated at Ser63.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Ser63 of human c-Jun protein.	
Product Description	This Cell Signaling Technology antibody is conjugated to biotin under optimal conditions. The biotinylated antibody is expected to exhibit the same species cross-reactivity as the unconjugated Phospho-c-Jun (Ser63) (54B3) Rabbit mAb #2361.	

MW (kDa)

48

Background

c-Jun is a member of the Jun family containing c-Jun, JunB, and JunD, and is a component of the transcription factor activator protein-1 (AP-1). AP-1 is composed of dimers of Fos, Jun, and ATF family members and binds to and activates transcription at TRE/AP-1 elements (reviewed in 1). Extracellular signals, including growth factors, chemokines, and 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). Knockout 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 context (7-9). Other target genes regulate survival, as well as hypoxia and angiogenesis (8,10). Research studies have implicated c-Jun as a promising therapeutic target for cancer, vascular remodeling, acute inflammation, and rheumatoid arthritis (11,12).

Background References

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3. Hilberg, F. et al. (1993) *Nature* 365, 179-81.
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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.
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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. Dass, C.R. and Choong, P.F. (2008) *Pharmazie* 63, 411-4.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key**WB:** Western Blotting**Cross-Reactivity Key**

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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