

<b>Cat. No:</b>	MAB-94227
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100 ug
<b>Clone:</b>	54B3
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Rb
<b>Isotype:</b>	IgG
<b>Reactivity:</b>	Hu
<b>Applications:</b>	Western Blot: 1:1000 Immunofluorescence 1:50 - 1:200
<b>Molecular Weight:</b>	48 kDa

<b>Purification:</b>	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Ser63 of human c-Jun.
<b>Background:</b>	<p>c-Jun is a member of the Jun Family containing c-Jun, JunB and JunD, and is a component of the transcription factor AP-1 (activator protein-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). 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 context (7-9). Other target genes regulate survival as well as hypoxia and angiogenesis (8,10). c-Jun has emerged as a promising therapeutic target for cancer, vascular remodeling, acute inflammation, as well as rheumatoid arthritis (11,12). Phospho-c-Jun (Ser63) (54B3) Rabbit mAb detects endogenous levels of c-Jun only when phosphorylated at serine 63.</p>
<b>Form:</b>	liquid
<b>Buffer:</b>	PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.
<b>Storage:</b>	Store at -20°C. Avoid freeze / thaw cycles.

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

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