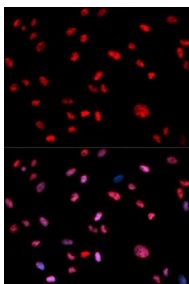


Cat. No:	ABP-0049
Conjugate:	Unconjugated
Size:	100 ug
Clone:	Poly
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu
Applications:	WB: 1:1000, IF: 1:50-1:200
Molecular Weight:	48 kDa

Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Thr239 of human c-Jun. Antibodies are purified by protein A and peptide affinity chromatography.

Background: 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 (Thr239) Antibody detects endogenous levels of c-Jun only when phosphorylated at Thr239.

Form:	liquid
Buffer:	Supplied in 0.02% sodium azide, 50% glycerol, pH7.3.
Storage:	Store at -20°C. Do not aliquot the antibody.



Immunofluorescence analysis of U2OS

cell using Phospho-c-Jun (Thr239)
antibody. Blue: DAPI for nuclear staining.

References

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.

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