

#2994 Store at -20°C

Phospho-c-Jun (Ser243) Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	48	Rabbit	#P05412	3725

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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.

Specificity / Sensitivity

Phospho-c-Jun (Ser243) Antibody detects endogenous levels of total c-Jun protein only when phosphorylated at Ser243.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Ser243 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 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).

c-Jun has also been reported to become phosphorylated at the C-terminal sites Thr239 and Ser243. The phosphorylation of Ser243 may participate in its downregulation (13).

Background References

- Jochum, W. et al. (2001) *Oncogene* 20, 2401-12.
- Davis, R.J. (2000) *Cell* 103, 239-52.
- Hilberg, F. et al. (1993) *Nature* 365, 179-81.
- Raivich, G. et al. (2004) *Neuron* 43, 57-67.
- Behrens, A. et al. (2002) *EMBO J* 21, 1782-90.
- Riera-Sans, L. and Behrens, A. (2007) *J Immunol* 178, 5690-700.
- Leppä, S. and Bohmann, D. (1999) *Oncogene* 18, 6158-62.
- Shaulian, E. and Karin, M. (2002) *Nat Cell Biol* 4, E131-6.
- Weiss, C. and Bohmann, D. (2004) *Cell Cycle* 3, 111-3.
- Karamouzis, M.V. et al. (2007) *Mol Cancer Res* 5, 109-20.
- Kim, S. and Iwao, H. (2003) *J Pharmacol Sci* 91, 177-81.
- Dass, C.R. and Choong, P.F. (2008) *Pharmazie* 63, 411-4.
- Morton, S. et al. (2003) *EMBO J* 22, 3876-3886.

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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