

Phospho-c-Jun (Ser73) (D47G9) XP® Rabbit mAb (Alexa Fluor® 488 Conjugate)

✓ 100 µl
 (50 tests)



Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
Web ■ www.cellsignal.com

New 07/13

For Research Use Only. Not For Use In Diagnostic Procedures.

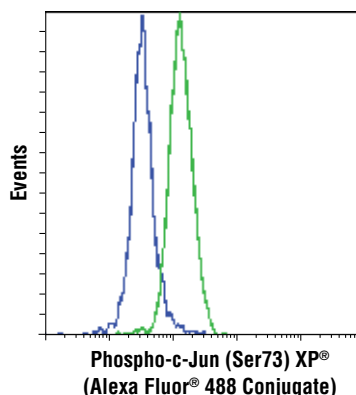
Applications	Species Cross-Reactivity*	Isotype
F Endogenous	H, M, R, Mk	Rabbit IgG

Description: This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated Phospho-c-Jun (Ser73) (D47G9) XP® Rabbit mAb #3270.

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). 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). Research studies have implicated c-Jun as a promising therapeutic target for cancer, vascular remodeling, acute inflammation, and rheumatoid arthritis (11,12).

Specificity/Sensitivity: Phospho-c-Jun (Ser73) (D47G9) XP® Rabbit mAb (Alexa Fluor® 488 Conjugate) detects endogenous levels of c-Jun only when phosphorylated at Ser73.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Ser73 of human c-Jun protein.



Flow cytometric analysis of HeLa cells, untreated (blue) or UV-treated (green), using Phospho-c-Jun (Ser73) (D47G9) XP® Rabbit mAb (Alexa Fluor® 488 Conjugate).

Entrez Gene ID #3725
UniProt ID #P05412

Storage: Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. *Do not aliquot the antibodies. Protect from light. Do not freeze.*

***Species cross-reactivity is determined by western blot using the unconjugated antibody.**

Recommended Antibody Dilutions:

Flow Cytometry 1:50

For product 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 complementary products.

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

The Alexa Fluor® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc., for research use only, except for use in combination with DNA microarrays. The Alexa Fluor® dyes (except for Alexa Fluor® 430 dye) are covered by pending and issued patents.
 Alexa Fluor® is a registered trademark of Molecular Probes, Inc.

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 Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.