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

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

Applications: FC-FP	Reactivity: H M R Mk Pg	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #P05412	Entrez-Gene Id: 3725
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Product Usage Information

Application

Flow Cytometry (Fixed/Permeabilized)

Dilution

1:50

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 antibody. Protect from light. Do not freeze.

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.

Species predicted to react based on 100% sequence homology

Bovine

Source / Purification

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

Description

This Cell Signaling Technology antibody is conjugated to Alexa Fluor[®] 488 fluorescent dye and tested in-house for direct flow cytometry 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). 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

- 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.

Species Reactivity

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

Applications Key

FC-FP: Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey **Pg:** Pig

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