

# c-Jun Control Cell Extracts

Controls for 10 Western mini-blot

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rev. 03/14/07

This product is for *in vitro* research use only and is not intended for use in humans or animals.

**Background:** c-Jun is a component of the transcription factor AP-1, which binds and activates transcription at TRE/AP-1 elements. The transcriptional activity of c-Jun is regulated by phosphorylation at Ser63 and Ser73 (1,2). Extracellular signals including growth factors, transforming oncoproteins and UV irradiation stimulate phosphorylation of c-Jun at Ser63/73 and activate c-Jun-dependent transcription. Mutation of Ser63/73 renders c-Jun nonresponsive to mitogenic and stress-induced signaling pathways. The MAP kinase homologue SAPK/JNK binds to the amino-terminal region of c-Jun and phosphorylates c-Jun at Ser63/73. In addition, the activity of SAPK/JNK is stimulated by the same signals that activate c-Jun (3,4).

**Description:** *Nonphosphorylated c-Jun (Ser63) II Cell Extracts:* Total cell extracts from NIH/3T3 cells, prepared without treatment, serve as a negative control. Supplied in SDS Sample Buffer.

*Phosphorylated c-Jun (Ser63) II Cell Extracts:* Total cell extracts from NIH/3T3 cells, prepared with UV treatment, serve as a positive control. Supplied in SDS Sample Buffer.

**Applications:** As controls, we recommend using 15 µl of phosphorylated and nonphosphorylated c-Jun control extracts.

**Background References:**

- (1) Binetruy, B. et al. (1991) *Nature* 351, 122–127.
- (2) Smeal, T. et al. (1991) *Nature* 354, 494–496.
- (3) Derijard, B. et al. (1994) *Cell* 76, 1025–1037.
- (4) Kyriakis, J.M. et al. (1994) *Nature* 369, 156–160.

**Storage Buffer:** SDS Sample Buffer: 62.5 mM Tris-HCl (pH 6.8 at 25°C), 2% w/v SDS, 10% glycerol, 50 mM DTT, 0.01% w/v bromophenol blue or phenol red. Store at -20°C.

**Companion Products:**

Phospho-c-Jun (Ser73) Antibody #9164

PhosphoPlus® c-Jun (Ser63) II and c-Jun (Ser73) Antibody Kit #9260

Phospho-c-Jun (Ser63) II Antibody #9261

c-Jun (60A8) Rabbit mAb #9165

Phototope®-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071

Anti-rabbit IgG, HRP-linked Antibody #7074

Prestained Protein Marker, Broad Range (Premixed Format) #7720

Biotinylated Protein Ladder Detection Pack #7727

20X LumiGLO® Reagent and 20X Peroxide #7003