



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Anti-phospho-c-Jun (phosphoserine 73)

Developed in Rabbit,
Affinity Isolated Antibody

Product Number **J 2253**

Product Description

Anti-phospho-c-Jun (phosphoserine 73) is developed in rabbit using a synthetic phosphoserine 73 peptide corresponding to residues around Ser73 of human c-Jun and conjugated to KLH, as immunogen. The antibody is affinity-purified using the protein A and peptide affinity chromatography.

Anti-phospho-c-Jun (phosphoserine 73) detects c-Jun phosphorylated at phosphoserine 73. This antibody reacts with human and mouse and does not react with nonphosphorylated c-Jun or JunD. Anti-phospho-c-Jun (phosphoserine 73) may be used in immunoblotting.

c-Jun is a component of the transcription factor AP-1 that binds and activates transcription at TRE/AP-1 elements and appears to be a major downstream target of the SAPK/JNK signaling pathway. 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 N-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}

Reagents

Anti-phospho-c-Jun (phosphoserine 73) is supplied as an affinity-isolated antibody in 10 mM sodium HEPES, pH 7.5, containing 150 mM sodium chloride, 100 µg/ml bovine serum albumin and 50% glycerol.

Storage/Stability

Store at 0 °C to -20 °C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Recommended working dilution is 1:1,000 for immunoblotting (chemiluminescent) using an extract of anisomycin or UV-treated NIH-3T3 cells.

For immunoblotting, incubate membrane with diluted antibody in 5% bovine serum albumin (BSA), 1X Tris buffered saline and 0.1% Tween-20 at 2-8 °C with gentle shaking, overnight.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working dilution by titration test.

References

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

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