3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-phospho-c-Jun (pSer^{63})
produced in rabbit, affinity isolated antibody

Catalog Number **J2128**

Product Description

Anti-phospho-c-Jun (pSer^{63}) is produced in rabbit using as immunogen a synthetic phosphoserine^{63} peptide corresponding to residues around Ser^{63} of human c-Jun, conjugated to KLH. The antibody is affinity purified using protein A and peptide affinity chromatography.

Anti-phospho-c-Jun (pSer^{63}) detects phosphorylated Ser^{63} of c-Jun. This antibody reacts with human, rat, and mouse. It does not cross-react with the corresponding phosphorylated form of JunD or JunB. It may be used for immunoblotting and flow cytometry.

c-Jun is a component of the transcription factor AP-1 that binds and activates transcription at TRE/AP-1 elements. The transcriptional activity of c-Jun is regulated by phosphorylation at Ser^{63} and Ser^{73}.[1, 2] Extracellular signals including growth factors, transforming oncoproteins and UV irradiation stimulate phosphorylation of c-Jun at Ser$^{63/73}$ and activate c-Jun dependent transcription. Mutation of Ser$^{63/73}$ 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 Ser$^{63/73}$. In addition, the activity of SAPK/JNK is stimulated by the same signals that activate c-Jun.[3, 4]

Reagent

Supplied in 10 mM HEPES sodium, pH 7.5, containing 150 mM sodium chloride, 100 μg/mL bovine serum albumin and 50% glycerol.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at −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

Immunoblotting (chemiluminescent): recommended working dilution is 1:1,000 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.

Flow cytometry: recommended working dilution is 1:200

Note: In order to obtain the best results in various techniques and preparation, we recommend determining optimal working dilution by titration.

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).

IDC,PHC 01/12-1