SP600125

#8177 Store at -20°C

☑ 10 mg

Cell Signaling TECHNOLOGY®

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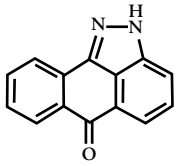
rev. 02/27/18

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

Background: Novel, potent, and selective JNK-1,-2, and -3 inhibitor, SP600125 is an ATP-competetive inhibitor effective on a range of kinases and enzymes. In cells, SP600125 caused a dose-dependent inhibition of the phosphorylation of c-Jun, the expression of inflammatory genes IL-2, COX-2, TNF-α, IFN-γ, and blocked the activation and differentiation of primary human CD4 cell cultures (1). SP600125 has also demonstrated inhibitory effects on tumor cell proliferation, endothelial cell migration, and tumor growth as well as blocking tumor and endothelial cells in the G_2 phase of the cell cycle (2).

Molecular Formula: $C_{14}H_8N_2O$

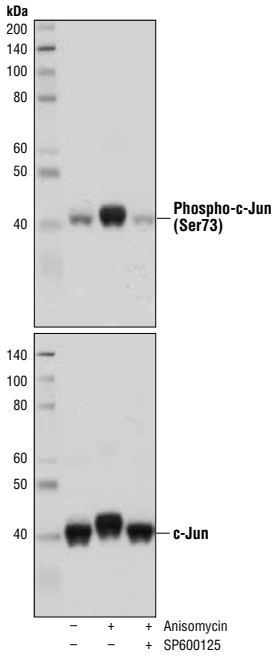


Molecular Weight: 220.23 g/mol

Solubility: Soluble in DMSO at 65 mg/ml; poorly soluble in ethanol and water.

Purity: >99%.

Directions for Use: SP600125 is supplied as a lyophilized powder. For a 25 mM stock, reconstitute the 10 mg in 1.82 ml DMSO. Working concentrations and length of treatment can vary depending on the desired effect, but it is typically used as a pre-treatment at 25-50 μM for 15-45 minutes prior to treating with a stimulator.



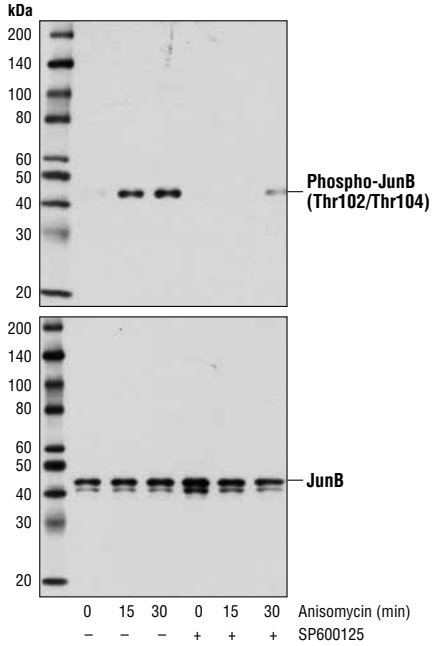
Western blot analysis of extracts from 293T cells, untreated or treated with anisomycin (25 µg/ml, 15 min) either with or without SP600125 pre-treatment (50 µM, 40 min), using Phospho-c-Jun (Ser73) (D47G9) XP® Rabbit mAb #3270 (upper) or c-Jun (60A8) Rabbit mAb #9165 (lower).

Storage: Store lyophilized or in solution at -20°C, desiccated. Protect from light. In lyophilized form, the chemical is stable for 24 months. Once in solution, use within 3 months to prevent loss of potency. Aliquot to avoid multiple freeze/thaw cycles.

Background References:

(1) Bennett, B.L. et al. (2001) *Proc Natl Acad Sci U S A* 98, 13681-6.

(2) Ennis, B.W. et al. (2005) *J Pharmacol Exp Ther* 313, 325-32.



Western blot analysis of extracts from 293T cells, untreated or treated with anisomycin (25 µg/ml) for the indicated times either with or without SP600125 pre-treatment (50 µM, 40 min), using Phospho-JunB (Thr102/Thr104) (D3C6) Rabbit mAb #8053 (upper) or JunB (C37F9) Rabbit mAb #3753 (lower).