Revision 1

Store at -20C

#8177

SP600125

10 mg

Cell Signaling TECHNOLOGY®

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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

Purity

>99%

CAS

129-56-6

Solubility

Soluble in DMSO at 65mg/ml.

Storage

Store lyophilized or in solution at -20ºC, 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.

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

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.

Trademarks and Patents

Limited Uses