

## **Data Sheet**

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 Product Name
 :
 SP600125

 Cat. No.
 :
 PC-42856

 CAS No.
 :
 129-56-6

 Molecular Formula
 :
 C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>O

 Molecular Weight
 :
 220.2261

 Target
 :
 JNK

**Solubility** : DMSO: ≥ 45 mg/mL



## **Biological Activity**

SP600125 (SP 600125) is a potent, selective, reversible, ATP-competitive inhibitor of **JNK** with IC50 of 40, 40 and 90 nM for JNK1, JNK2 and JNK3, respectively.

SP600125 displays 300-fold selectivity against related MAP kinases ERK1 and p38, and PKA.

SP600125 dose dependently inhibits the phosphorylation of c-Jun, the expression of inflammatory genes COX-2, IL-2, IFN- $\gamma$ , TNF- $\alpha$ , and prevents the activation and differentiation of primary human CD4 cell cultures.

SP600125 blocks LPS-induced expression of TNF- $\alpha$  and inhibits anti-CD3-induced apoptosis of CD4+ CD8+ thymocytes in vivo model of endotoxin-induced inflammation.

SP600125 also is a potent NAD(P)H: quinone oxidoreductase 1 (**NQO1**) inhibitor, binds to the active pocket of NQO1 and inhibits NQO1 activity, inhibits NQO1-dependent cell death.

## References

Bennett BL, et al. *Proc Natl Acad Sci U S A*. 2001 Nov 20;98(24):13681-6.

Han Z, et al. *J Clin Invest*. 2001 Jul;108(1):73-81.

Gee K, et al. J Immunol. 2002 Nov 15;169(10):5660-72.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com