

## SP600125

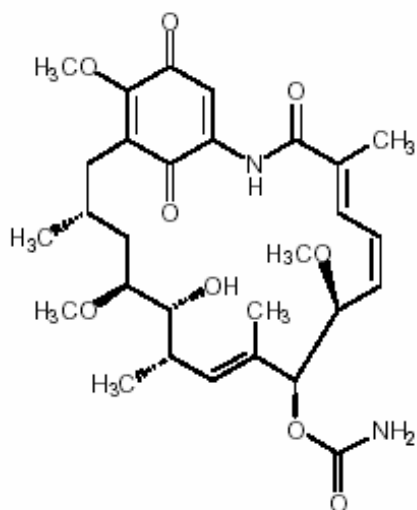
Product Specifications	
<b>Catalog Number:</b>	HPK-111
<b>Application Notes:</b>	Not sterile <i>The optimal dilution for a specific application must be determined by the investigator</i>
<b>Molecular Weight:</b>	220.2 g/mol
<b>Purity:</b>	>98% as determined by TLC
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>8</sub> N <sub>2</sub> O
<b>Physical Appearance:</b>	Yellow solid; soluble in DMSO (20mM)
<b>Storage:</b>	Store at Room Temperature <i>Shipping conditions may differ from the recommended storage temperature</i>
<b>Related Products:</b>	
900-106	Jnk1/2 (phospho) EIA Kit
905-662	Jnk/SAPK (phospho-Thr183/Tyr185) Monoclonal Antibody (9H8)
KAP-SA011	Jnk1/2 (SAPK) (phospho-Thr183/Tyr185) Polyclonal Antibody
900-099	TNF-α (human) EIA Kit
900-136	Interferon-γ (human) EIA Kit
900-137	Interferon-γ (mouse) EIA Kit

### Background:

A novel, potent and selective JNK1,-2,-3 inhibitor (IC<sub>50</sub> = 0.11μM)<sup>1</sup>, SP600125 is a reversible ATP-competitive inhibitor with >300-fold selectivity versus related MAP kinases including Erk1 and p38-2 as well as PKA and IKK-2<sup>2</sup>. It is cell-permeable and dose dependently inhibits the phosphorylation of c-jun and the expression of inflammatory genes COX-2, IL-2, IFN-γ and TNF-α (IC<sub>50</sub> = 5-10μM) in Jurkat T Cells. *In vivo*, it blocks LPS-induced expression of TNF-α and inhibits anti CD3-induced apoptosis of CD4+CD8+ thymocytes<sup>1</sup>. It displays beneficial effects in a rat model of rheumatoid arthritis<sup>2</sup>.

#### References:

1. B.L.Bennett *et al.* (2001) Proc Natl Acad Sci USA **98**, 13681
2. H.Han *et al.* (2001) J Clin Invest. **108**, 73



Structure