SP600125
JNK Inhibitor
Catalog # tlrl-sp60
For research use only
Version # 10L01-MM

PRODUCT INFORMATION

Content:
- 10 mg SP600125

Storage and stability:
- SP600125 is provided as a solid and shipped at room temperature. Store at -20°C. Solid product is stable 1 year at -20°C.
- Upon resuspension, prepare aliquots of SP600125 and store at -20°C. Avoid repeated freeze-thaw cycles. Resuspended product is stable for 3 months at -20°C when properly stored.

DESCRIPTION

SP600125 is a potent, cell-permeable, selective and reversible inhibitor of c-Jun N-terminal kinase (JNK). It inhibits in a dose-dependent manner the phosphorylation of JNK. JNK is a member of the mitogen-activated protein kinase (MAPK) family and plays an essential role in TLR-mediated inflammatory responses.1,2


CHEMICAL PROPERTIES

CAS number: 129-56-6
Synonym: SAPK inhibitor II
Formula: C14H8N2O
Molecular weight: 220.2
Solubility: 100 mM in DMSO and 10 mM in ethanol
Appearance: Yellowish orange solid
Purity: >99% (HPLC)

METHODS

Preparation of a sterile stock solution (50 mM)
To obtain a 50 mM stock solution:
1. Add 910 µl DMSO to 10 mg SP600125 vial.
2. Vortex until complete solubilization.
3. Prepare aliquots and store at -20°C.

Note: It is recommended to use the stock solution directly to treat your cells, as SP600125 will precipitate if further diluted in H2O or PBS.

Working concentration: 10-50 µM
Jun N-terminal kinase (JNK) inhibition:
To assess the role of JNK, pretreat cells (such as T cells or HEK293 cells transfected with one or several TLR genes) for 20 min to 1 hour with SP600125 at 10-50 µM and then incubate at 37°C with the appropriate TLR ligand for 1 to 6 hours. The cell lysates of the stimulated cells can be used to detect phosphorylation of MAPK by immunoblotting for JNK with a phosphospecific antibody for JNK, ERK, p38, or IKK.1,2

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