

**Product Name:** SP 600125

**Catalog No.:** 1496

**Batch No.:** 11

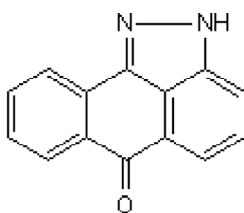
CAS Number: 129-56-6

EC Number: 204-955-6

IUPAC Name: Anthra[1-9-*cd*]pyrazol-6(2*H*)-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>O.  
**Batch Molecular Weight:** 220.23  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	76.35	3.66	12.72
Found	75.97	3.64	12.76

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

SP 600125 is a selective JNK inhibitor. Competitively and reversibly inhibits JNK1, 2 and 3 (IC<sub>50</sub> = 40 - 90 nM) with negligible activity at ERK2, p38β and a range of enzymes. Active in vivo. Exhibits reduced selectivity over other protein kinases under certain conditions. SP 600125 protects renal tubular epithelial cells from ischemia/reperfusion-induced apoptosis. Promotes chondrogenesis of bone mesenchymal stem cells by inhibition of TNF-α-induced inflammation. Adipogenesis from MSCs is also promoted by SP 600125. Essential component of medium for maintaining stem cells in naive pluripotent state.

**Physical and Chemical Properties:**

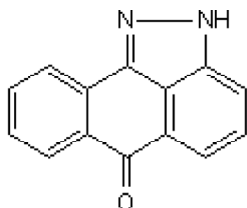
Batch Molecular Formula: C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>O.

Batch Molecular Weight: 220.23

Physical Appearance: Yellow solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Ding et al** (2021) SP600125 restored TNF-α-induced impaired chondrogenesis in bone mesenchymal stem cells and its antiosteoarthritis effect in mice. *Stem Cells Dev.* **30** 1028. PMID: 34486378.

**Zhao et al** (2013) Activation of JNKs is essential for BMP9-induced osteogenic differentiation of mesenchymal stem cells. *BMB Rep.* **46** 422. PMID: 23977991.

**Wang et al** (2007) SP600125, a selective JNK inhibitor, protects ischemic renal injury via suppressing the extrinsic pathways of apoptosis. *Life Sci.* **80** 2067. PMID: 17459422.

**Storage:** Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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