Cat No. 60-S25

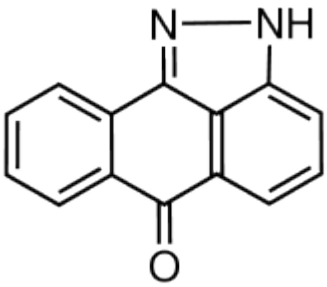
SP600125

10 mg

For research purposes only

SP600125 is a selective, reversible ATP competitive inhibitor of c-Jun N-terminal kinase (JNK). It exhibits greater than 300-fold selectivity for JNK against related MAP kinases ERK1 and p38-2, and the serine threonine kinase PKA. In cells, SP600125 causes dose-dependent inhibition of the phosphorylation of c-Jun, the expression of inflammatory genes IL-2, COX-2, TNF-α, IFN-γ, and blocks the activation and differentiation of primary human CD4 cell cultures.

TECHNICAL INFORMATION



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

Chemical Formula: $C_{14}H_8N_2O$

CAS Number: 129-56-6

Molecular Weight: 220.23

Purity: >99%

Appearance: yellow powder

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble to 100mM in DMSO. Note: for most cells, the maximum tolerance to DMSO is <0.5%. If a precipitate is observed, vortex for 5 minutes.

REFERENCES

1. Bennett et al. (2001) SP600125, an anthrapyrazolone inhibitor of Jun N-terminal kinase. PNAS. 98(24):13681-6.
2. Assi et al. (2006) The specific JNK inhibitor SP600125 targets tumour necrosis factor-α production and epithelial cell apoptosis in acute marine colitis. Immunology. 118(1):112-121.
3. Nakava et al. (2009) A JNM inhibitor SP600125 induces defective cytokinesis and enlargement in P19 embryonal carcinoma cells. Cell Biochem Funct. 27(7):468.72.
4. Renlund et al. (2008) c-Jun N-terminal Kinase Inhibitor II (SP600125) activates mullerian inhibiting substance type II receptor-mediated signal transduction. Endocrinology. 149(1): 108-115.