1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{11}H_{10}BrN_5O_2$

Batch Molecular Weight: 324.13

Physical Appearance: Yellow solid

Solubility: DMSO to 10 mM

Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows >99% purity

$^1$H NMR: Consistent with structure
**Product Name:** 10Z-Hymenialdisine  
**Catalog No.:** 1532  
**Batch No.:** 1

**CAS Number:** 82005-12-7  
**IUPAC Name:** (4Z)-4-(2-Amino-1,5-dihydro-5-oxo-4H-imidazol-4-ylidene)-2-bromo-4,5,6,7-tetrahydropyrrolo[2,3-c]azepin-8(1H)-one

**Description:**  
Pan kinase inhibitor (IC$_{50}$ values are 6, 10, 22, 28, 35, 40, 70, 80, 100, 470, 500, 600, 700 and 700 nM for MEK1, GSK-3β, Cdk1/cyclin B, Cdk5/p25, CK1, Cdk2/cyclin A, Cdk2/cyclin E, ASK-γ, Cdk3/cyclin E, Erk1, PKCy, Cdk4/cyclin D1, Cdk6/cyclin D2 and PKCa respectively.) Inhibits NF-κB activation and blocks IL-8 production in U937 cells (IC$_{50}$ values are 1-2 and 0.34-0.48 μM respectively).

**Physical and Chemical Properties:**  
- **Batch Molecular Formula:** C$_{11}$H$_{16}$BrN$_2$O$_2$  
- **Batch Molecular Weight:** 324.13  
- **Physical Appearance:** Yellow solid

**Minimum Purity:** >97%

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.  
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 10 mM  
The quoted HPLC value is for the sum of E/Z isomers. The E isomer readily converts to the Z isomer in solution in DMSO (JMC, 2002, 45, 2, 529-532)

**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. Our standard recommendations are:  
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.

**References:**  