

Product Name: IU1

Catalog No.: 4088

Batch No.: 1

CAS Number: 314245-33-5

IUPAC Name: 1-[1-(4-Fluorophenyl)-2,5-dimethyl-1*H*-pyrrol-3-yl]-2-(1-pyrrolidinyl)ethanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈H₂₁FN₂O·¼H₂O

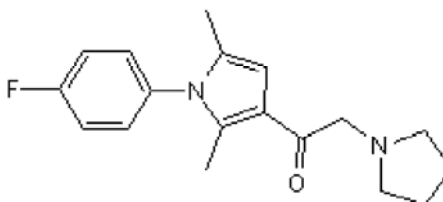
Batch Molecular Weight: 304.87

Physical Appearance: Brown solid

Solubility: DMSO to 100 mM
ethanol to 50 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.91	7.1	9.19
Found	70.8	6.97	9.1

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

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Description:

Selective inhibitor of Usp14; inhibits the catalytic activity of proteasome-associated Usp14 in vitro ($IC_{50} < 4 \mu M$). Stimulates proteasome activity and substrate degradation.

Physical and Chemical Properties:

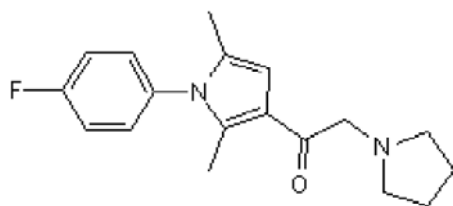
Batch Molecular Formula: $C_{18}H_{21}FN_2O \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 304.87

Physical Appearance: Brown solid

Minimum Purity: $\geq 98\%$

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 50 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. 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.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 1 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

References:

Lee *et al* (2010) Enhancement of proteasome activity by a small-molecule inhibitor of USP14. *Nature* **467** 179. PMID: 20829789.

Lee *et al* (2010) Trimming of ubiquitin chains by proteasome-associated deubiquitinating enzymes. *Mol.Cell.Proteomics* **10** R110. PMID: 20823120.

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