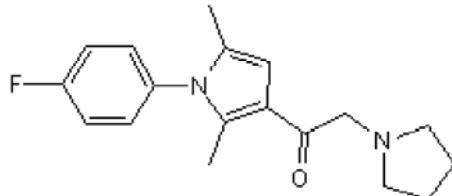


**Certificate of Analysis**[www.tocris.com](http://www.tocris.com)**Product Name:** IU1**Catalog No.:** 4088**Batch No.:** 1

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:** C<sub>18</sub>H<sub>21</sub>FN<sub>2</sub>O·1/4H<sub>2</sub>O**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**<sup>1</sup>H 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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

# Product Information

[www.tocris.com](http://www.tocris.com)**Product Name:** IU1**Catalog No.:** 4088**Batch No.:** 1

CAS Number: 314245-33-5

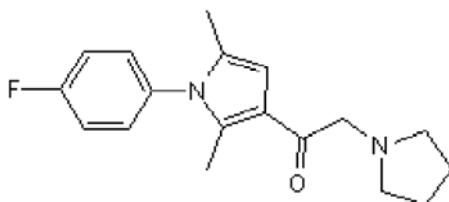
IUPAC Name: 1-[1-(4-Fluorophenyl)-2,5-dimethyl-1*H*-pyrrol-3-yl]-2-(1-pyrrolidinyl)ethanone**Description:**

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:  $C_{18}H_{21}FN_2O.1/2H_2O$ 

Batch Molecular Weight: 304.87

Physical Appearance: Brown solid

**Minimum Purity:** ≥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.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956