

**DATA SHEET**

**Product Name:** IU1

**Catalog #:** N-1197

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

**Source:** Synthetic

**Molecular Mass:** 300.4 C<sub>18</sub>H<sub>21</sub>FN<sub>2</sub>O

**Analysis:** >98% (TLC); NMR (Conforms)

**Supplied As:** Beige powder

**Resuspension:** May be dissolved in DMSO (30 mg/ml): or ethanol (15 mg/ml)

**Storage:** Store desiccated as supplied at 4°C for up to 2 years. Store solutions at -20°C for up to 1 months.

**Description:** Selective inhibitor of Usp14 (IC<sub>50</sub><4 μM). Enhances proteasome activity and substrate proteolysis<sup>1,2</sup>. Inhibits Dengue virus replication<sup>3</sup>. In prion-infected CAD5 cells activation of the ubiquitin proteasome system by IU1 is sufficient to induce clearance of polyubiquitinated substrates and reduce misfolded prion protein load<sup>4</sup>. Attenuates ischemia/reperfusion-induced neuronal injury in a mouse model<sup>5</sup>. Cell permeable.

**References:**

1. Lee, B.H., et al., (2010) Nature, *467*: 1179
2. Lee, M.J., et al., (2010) Mol. Cell. Proteomics, *10*: R110
3. Nag, D.K., and Finley, D., (2012) Virus Res., *165*: 103
4. McKinnon, C., et al., (2016) Acta Neuropathol., *131*: 411
5. Min, J.W., et al., (2017) J. Neurochem., *140*: 826

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