

## IU1

**Catalog #:** 27227

**Lot #:** 120628

**Size:** 10 mg

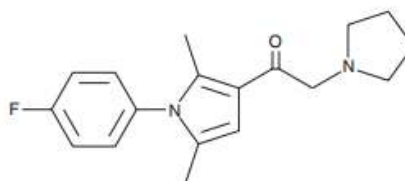
**CAS Registry #:** 314245-33-5

**Purity:** ≥98%

**Chemical Formula:** C<sub>18</sub>H<sub>21</sub>FN<sub>2</sub>O

**Molecular Weight:** 300.4

**Structure:**



**Description:** IU1 inhibits USP14 in a reversible manner resulting in increasing proteasome activity. It selectively stimulates ubiquitin-dependent protein degradation *in vitro* at 34 μM and in MEF cells at 50 μM. IU1 can also reduce accumulation of oxidized proteins in HEK293 cells, which alleviates cytotoxicity induced by oxidative stress.

**Appearance:** A crystalline solid

**Solubility:** Soluble in DMSO, DMF and ethanol purged with an inert gas. Solubility is approximately 20 mg/ml in DMSO, DMF and ethanol. For maximum solubility, dissolve in DMF, then dilute with aqueous buffer of choice. Do not store aqueous solutions for more than one day.

**Biological Activity:** IU1 inhibits deubiquitination by USP14, demonstrating an IC<sub>50</sub> value of 4-5 μM.

**Storage/Stability:** Store at or below -20°C for up to two years.

**Quality Control:** The purity was determined by HPLC analysis.

**Reference(s):**

1. Lee, B.H., *et al.*, *Nature* 2010;**467**:179-184.