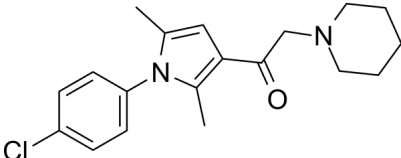


Certificate of Analysis

Catalog Number	BP13287
Product Name	IU1-47

Physical and Chemical Properties

CAS No.	670270-31-2
Chemical Formula	C ₁₉ H ₂₃ ClN ₂ O
Molecular Weight	330.86
Solubility	DMSO: 16.67 mg/mL (50.39 mM), Need ultrasonic
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	IU1-47 is an effective and specific USP14 inhibitor (IC ₅₀ : 0.6 μM). IU1-47 causes tau elimination in cultured neurons. IU1-47 inhibits IsoT/USP5 (IC ₅₀ : 20 μM).
Targets&IC ₅₀	USP14:0.6 μM, IsoT/USP5:20 μM

In vitro	IU1-47 stimulates tau degradation principally via the ubiquitin-proteasome system. IU1-47 is essentially inactive on free USP14. IU1-47 (25 μ M) antagonizes USP14 deubiquitinating activity and stimulates substrate degradation in vitro. IU1-47 (3 μ M, 10, and 30 μ M; 48 hours) obviously reduces Tau and phosphatase species Ser-202/Thr-205 levels in murine cortical primary neurons.
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Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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