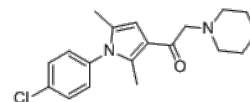


**Product Name** : IU1-47  
**Cat. No.** : PC-62623  
**CAS No.** : 670270-31-2  
**Molecular Formula** : C<sub>19</sub>H<sub>23</sub>ClN<sub>2</sub>O  
**Molecular Weight** : 330.856  
**Target** : Deubiquitinase (DUB)  
**Solubility** : 10 mM in DMSO



## Biological Activity

IU1-47 is a potent, selective small-molecule inhibitor of **USP14** with IC<sub>50</sub> of 0.6 μM, shows 10-fold more potent over IU1 and retains specificity for USP14.

IU1-47 accelerates the rate of degradation of wild-type tau, the pathological tau mutants P301L and P301S, and the A152T tau variant in primary neuronal cultures, a specific residue in tau, lysine 174, is critical for the IU1-47-mediated tau degradation by the proteasome.

IU1-47 stimulates autophagic flux in primary neurons.

## References

Boselli M, et al. *J Biol Chem*. 2017 Nov 24;292(47):19209-19225.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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