

Product Name	: IU-1
Synonyms	: USP14 inhibitor IU1
Cat No.	: M14014
CAS Number	: 314245-33-5
Molecular Formula	: C ₁₈ H ₂₁ FN ₂ O
Formula Weight	: 300.38
Chemical Name	: 1-[1-(4-fluorophenyl)-2,5-dimethylpyrrol-3-yl]-2-pyrrolidin-1-ylethanone
Description	IU-1 (USP14 inhibitor IU1) is a specific, small molecule inhibitor of deubiquitinating enzyme USP14 with IC ₅₀ of 4-5 uM; displays no activity against other human eight DUBs (Uch37, Uch-L1/L3, USP7, etc.); enhances proteasomal degradation in vivo, attenuates cerebral ischemia/reperfusion-induced neuronal injury in mice; also inhibits Dengue virus replication.
Pathway	: Proteasome/Ubiquitin
Target	: DUB
Receptor	: USP14
Solubility	: DMSO: 30 mg/mL (100 mM); Ethanol: 15 mg/mL (50 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
SMILES	: <chem>CC1=CC(C(CN2CCCC2)=O)=C(C)N1C3=CC=C(F)C=C3</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Lee BH, et al. Nature. 2010 Sep 9;467(7312):179-84.| 2. Nag DK, et al. Virus Res. 2012 Apr;165(1):103-6.| 3. Lahaie N, et al. J Biol Chem. 2016 Mar 25;291(13):7156-70.| 4. Min JW, et al. J Neurochem. 2017 Mar;140(5):826-833.