
IU1

产品编号: D50867

CAS: 314245-33-5

分子式: C₁₈H₂₁FN₂O

纯度: ≥98%

InChi: InChI=1S/C₁₈H₂₁FN₂O/c1-13-11-17(18(22)12-20-9-3-4-10-20)14(2)21(13)16-7-5-15(19)6-8-16/h5-8,11H,3-4,9-10,12H2,1-2H3

InChi Key: JUWDSKJBMFLHE-UHFFFAOYSA-N

Smiles: CC1=CC(C(=O)CN2CCCC2)=C(C)N1C1C=CC(F)=CC=1

外观: 固体粉末

作用通路: Autophagy

溶解性: DMSO up to 100 mM

保存条件: Store in dry, dark place for one year.

产品介绍: IU1 is a cell-permeable, reversible and selective inhibitor of human USP14 with an IC₅₀ of 4.7 μM. It selectively stimulates ubiquitin-dependent protein degradation in vitro at 34 μM and in MEF cells at 50 μM. At 75 μM, IU1 reduces accumulation of oxidized proteins in HEK293 cells, alleviating cytotoxicity induced by oxidative stress. Usp14 inhibition accelerated the degradation of oxidized proteins and enhanced resistance to oxidative stress. Enhancement of proteasome activity through inhibition of Usp14 may offer a strategy to reduce the levels of aberrant proteins in cells under proteotoxic stress.