

Data Sheet

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 Product Name
 :
 KL001

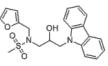
 Cat. No.
 :
 PC-36022

 CAS No.
 :
 309928-48-1

 Molecular Formula
 :
 C21H22N2O4S

 Molecular Weight
 :
 398.477

Target : Deubiquitinase (DUB)
Solubility : 10 mM in DMSO



Biological Activity

KL001 (KL-001) is a small molecule that specifically interacts with **cryptochrome (CRY)** and small molecule modulator of the circadian clock.

KL001 prevents **SCFFBXL3**-mediated ubiquitination and degradation of CRY, resulting in lengthening of the circadian period, interacts directly with CRY1 and CRY2 and stabilizes CRY proteins.

KL001-mediated CRY stabilization inhibited glucagon-induced gluconeogenesis in primary hepatocytes.

KL001 is the first-in-class cryptochrome-targeting circadian modulator and substrate-targeting ubiquitination antagonist.

References

Hirota T, et al. Science. 2012 Aug 31;337(6098):1094-7.

Nangle S, et al. *Cell Res.* 2013 Dec;23(12):1417-9.

St John PC, et al. *Proc Natl Acad Sci U S A*. 2014 Feb 4;111(5):2040-5.

Oshima T, et al. *Angew Chem Int Ed Engl.* 2015 Jun 8;54(24):7193-7.

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

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