



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

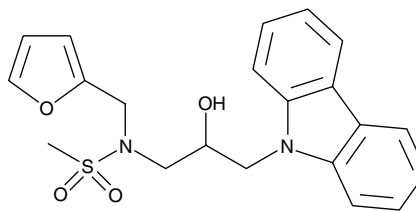
Product Information



KL001

Item No. 13878

CAS Registry No.: 309928-48-1
Formal Name: N-[3-(9H-carbazol-9-yl)-2-hydroxypropyl]-N-(2-furanylmethyl)-methanesulfonamide
MF: C₂₁H₂₂N₂O₄S
FW: 398.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 228, 235, 261, 293, 329, and 343 nm



Laboratory Procedures

For long term storage, we suggest that KL001 be stored as supplied at -20°C. It should be stable for at least two years. KL001 is supplied as a crystalline solid. A stock solution may be made by dissolving the KL001 in the solvent of choice. KL001 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of KL001 in these solvents is approximately 1, 5, 10 mg/ml, respectively.

KL001 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KL001 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. KL001 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

The cryptochrome proteins CRY1 and CRY2, which play central roles in maintaining the circadian clock, are expressed and then degraded in a rhythmic pattern.^{1,2} KL001 is a cell-permeable carbazolic compound which directly interacts with and stabilizes CRY1 and CRY2, preventing ubiquitin-dependent degradation while lengthening the circadian period (IC₅₀ = 0.82-14 μM).² As the expression of some gluconeogenic genes is both circadian and cryptochrome-dependent, KL001 effectively inhibits glucagon-induced gluconeogenesis in primary hepatocytes.² This product can be used to study the regulation of cryptochrome-dependent physiology and aid in the development of clock-based therapeutics of diabetes.

References

1. Busino, L., Bassermann, F., Maiolica, A., *et al.* SCFFbx13 controls the oscillation of the circadian clock by directing the degradation of cryptochrome proteins. *Science* **316**, 900-904 (2007).
2. Hirota, T., Lee, J.W., St.John, P.C., *et al.* Identification of small molecule activators of cryptochrome. *Science* **337**, 1094-1097 (2012).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/13878

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 12/19/2012

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com