

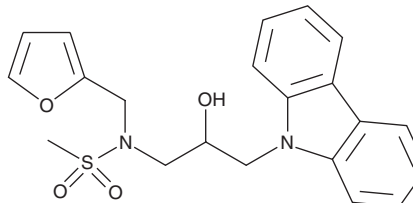
PRODUCT INFORMATION



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%
UV/Vis.: λ_{max}: 228, 235, 261, 293, 329, 343 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

KL001 is supplied as a crystalline solid. A stock solution may be made by dissolving the KL001 in the solvent of choice, which should be purged with an inert gas. KL001 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of KL001 in these solvents is approximately 1, 5, and 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 0.50 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.

Description

KL001 is a cryptochrome protein stabilizer.¹ It inhibits ubiquitin-induced degradation of cryptochrome 1 (CRY1) in HEK293T cells overexpressing CRY1 when used at a concentration of 50 μM. KL001 (0.3-24 μM) lengthens the circadian period in U2OS human osteosarcoma cells in a reporter assay. It reduces glucagon-induced expression of the genes encoding phosphoenolpyruvate carboxykinase (Pck1) and glucose-6-phosphatase (G6pc) in primary mouse hepatocytes in a concentration-dependent manner.

Reference

1. Hirota, T., Lee, J.W., St.John, P.C., *et al.* Identification of small molecule activators of cryptochrome. *Science* **337(6098)**, 1094-1097 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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