

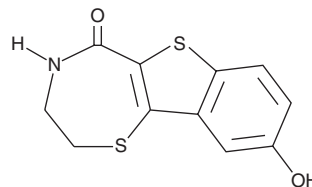
PRODUCT INFORMATION



kb NB 142-70

Item No. 18002

CAS Registry No.: 1233533-04-4
Formal Name: 3,4-dihydro-9-hydroxy-[1]benzothieno[2,3-f]-1,4-thiazepin-5(2H)-one
MF: C₁₁H₉NO₂S₂
FW: 251.3
Purity: ≥98%
UV/Vis.: λ_{max}: 218, 312, 355 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

kb NB 142-70 is supplied as a crystalline solid. A stock solution may be made by dissolving the kb NB 142-70 in the solvent of choice. kb NB 142-70 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of kb NB 142-70 in these solvents is approximately 30 mg/ml.

kb NB 142-70 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, kb NB 142-70 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. kb NB 142-70 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

kb NB 142-70 is a selective inhibitor of protein kinase D (PKD) with IC₅₀ values of 28.3, 58.7, and 53.2 nM for PKD1, 2, and 3, respectively.¹ It has been shown to inhibit prostate cancer cell migration and invasion, as well as reduce wound healing *in vitro*.^{1,2}

References

1. Lavalle, C.R., Bravo-Altamirano, K., Gorodhar, K.V., *et al.* Novel protein kinase D inhibitors cause potent arrest in prostate cancer cell growth and motility. *BMC Chem Biol.* **10(5)** (2010).
2. Young, S.H., Rozengurt, N., Sinnett-Smith, J. *et al.* Rapid protein kinase D1 signaling promotes migration of intestinal epithelial cells. *Am. J. Physiol. Gastrointest. Liver Physiol.* **303(3)**, G356-366 (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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/02/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM