

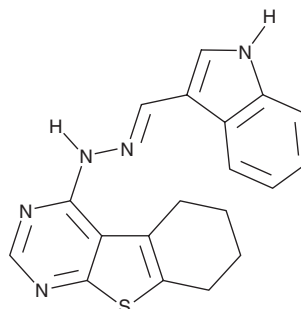
PRODUCT INFORMATION



B32B3

Item No. 16364

CAS Registry No.: 294193-86-5
Formal Name: 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone 1H-indole-3-carboxaldehyde
Synonym: VprBP Inhibitor
MF: C₁₉H₁₇N₅S
FW: 347.4
Purity: ≥95%
UV/Vis.: λ_{max}: 225, 269, 345 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

B32B3 is supplied as a crystalline solid. A stock solution may be made by dissolving the B32B3 in the solvent of choice, which should be purged with an inert gas. B32B3 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of B32B3 in these solvents is approximately 15 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of B32B3 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of B32B3 in DMF:PBS (pH 7.2) (1:2) is approximately 300 µg. We do not recommend storing the aqueous solution for more than one day.

Description

B32B3 is a cell-permeable, ATP-competitive inhibitor of VprBP that blocks phosphorylation of histone 2A at Thr¹²⁰ in DU-145 human prostate cancer cells (IC₅₀ = 500 nM).¹ It exhibits over 100-fold selectivity for VprBP against a panel of 33 other protein kinases.¹ B32B3 strongly suppresses the proliferation of DU-145 cells, which overexpress VprBP, but not MCL normal human prostate cells, which have low levels of VprBP expression.¹ At 5 mg/kg twice a week over three weeks, B32B3 inhibits the growth of DU-145 xenograft tumors in mice by 70-75%.¹

Reference

1. Kim, K., Kim, J.M., Kim, J.S., *et al.* VprBP has intrinsic kinase activity targeting histone H2A and represses gene transcription. *Mol. Cell* **52**(3), 459-467 (2013).

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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