

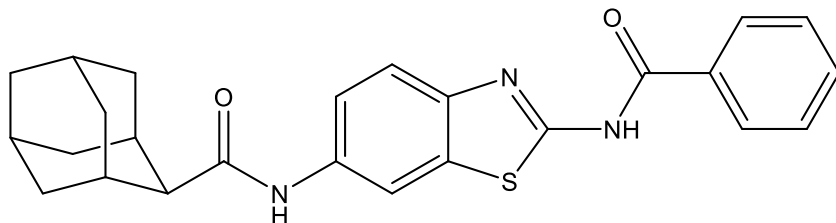
Catalog # 10-4694

NVP-231

CAS# 362003-83-6

N-[2-(Benzoylamino)-6-benzothiazolyl]tricyclo[3.3.1.1^{3,7}]decane-1-carboxamide

Lot # FBS2120



NVP-231 is a reversible inhibitor of ceramide kinase ($IC_{50} = 12 \text{ nM}$).¹ At 10 nM, it inhibited ceramide-1-phosphate formation by >50% and at 100 nM it completely inhibited its formation in cell culture. NVP-231 was inactive against hSphK1/2, hPI3K α , hPI4K β , hVps34, hGCS, hSMS-1, CERT, and 500-fold less potent against hDAGK α . NVP-231 inhibited breast and lung cancer cell proliferation via M phase arrest.² It potently blocked cell migration and invasion in PANC-1 pancreatic cancer cells³ as well as MDA-MB-231 breast cancer cells⁴.

- 1) Graf *et al.* (2008), *Targeting ceramide metabolism with a potent and specific ceramide kinase inhibitor*; Mol. Pharmacol., **74** 925
- 2) Pastukhov *et al.* (2014), *The ceramide kinase inhibitor NVP-231 inhibits breast and lung cancer cell proliferation by inducing M phase arrest and subsequent cell death*; Br. J. Pharmacol., **171** 5829
- 3) Rivera *et al.* (2016), *Ceramide-1-phosphate regulates cell migration and invasion of human pancreatic cancer cells*; Biochem. Pharmacol., **102** 107
- 4) Schwalm *et al.* (2020), *Ceramide Kinase Is Upregulated in Metastatic Breast Cancer Cells and Contributes to Migration and Invasion by Activation of PI3-Kinase and Akt*; Int. J. Mol. Sci., **21** 1396

PHYSICAL DATA

Molecular Weight:	431.55
Molecular Formula:	C ₂₅ H ₂₅ N ₃ O ₂ S
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase.
	Solutions in DMSO may be stored at -20°C for up to 3 months.

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