

# NVP 231

Catalog No: tcsc1808



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

362003-83-6

**Formula:**

$C_{25}H_{25}N_3O_2S$

**Pathway:**

Others

**Target:**

Others

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 41$  mg/mL (95.01 mM)

**Observed Molecular Weight:**

431.55

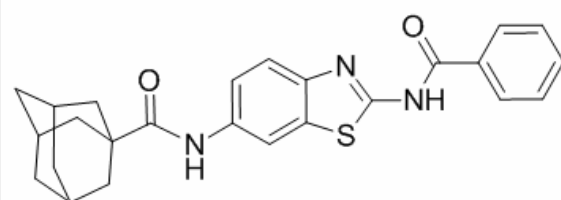
## Product Description

NVP-231 is a potent, specific, and reversible CerK inhibitor( $IC_{50}=12\pm 2$  nM) that competitively inhibits binding of ceramide to CerK.

IC50 Value: 12±2 nM [1]

Target: CERK

in vitro: NVP-231 showed an IC50 value of 12 ± 2 nM and 90% inhibition at 100 nM in the radioassay. NVP-231 did not compete with ATP but rather with ceramide, displaying an inhibition constant (Ki) of 7.4 nM. Furthermore, inhibition by NVP-231 was instantaneous and fully reversible, implying that this compound does not covalently modify CerK. At 10 nM, NVP-231 inhibited C1P formation by >50%; at 100 nM, NVP-231 achieved complete inhibition. Thus the potency and efficacy of NVP-231 observed in cell culture are consistent with those found in vitro. It is noteworthy that, NVP-231 did not inhibit GlcCer and SM formation; rather, it increased these metabolites in correlation with compound concentration, demonstrating that NVP-231 does not act as a general inhibitor of ceramide metabolism [1]. The EC(50) of NVP-231 in this assay is in the low nanomolar range, consistent with the IC(50) determined in activity assays in vitro using purified CerK [2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!