

AZ505

Catalog No: tcsc1735



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1035227-43-0

Formula:

$C_{29}H_{38}Cl_2N_4O_4$

Pathway:

Epigenetics

Target:

Histone Methyltransferase

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 42 mg/mL (72.72 mM)

Observed Molecular Weight:

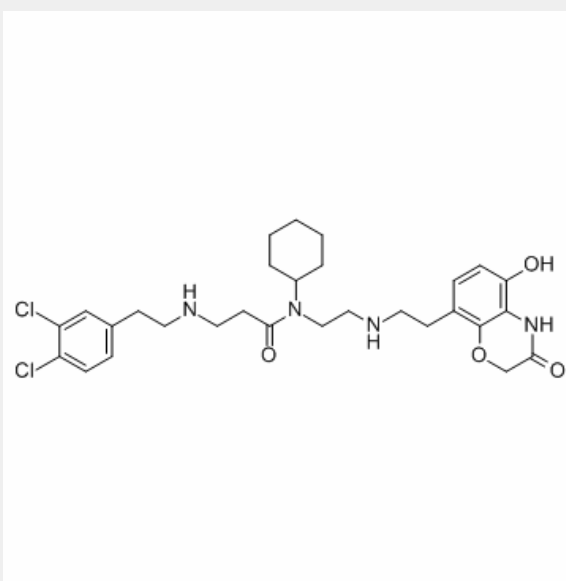
577.54

Product Description

AZ505 is a potent and selective **SMYD2** inhibitor with **IC₅₀** of 0.12 μ M.

IC50 & Target: IC50: 0.12 μ M (SMYD2)^[1]

In Vitro: AZ505 is highly selective and shows an activity at submicromolar concentrations in vitro. The IC₅₀ of AZ505 for SMYD2 is 0.12 μ M, which is >600-fold greater than the IC₅₀s of AZ505 for other histone methyltransferases, such as SMYD3 (IC₅₀>83.3 μ M), DOT1L (IC₅₀>83.3 μ M) and EZH2 (IC₅₀>83.3 μ M)^[1]. AZ505 is a potent and selective SMYD2 inhibitor with an IC₅₀ of 0.12 μ M. The human SMYD (SET and MYND domain-containing protein) family of protein lysine methyltransferases contains five members (SMYD1-5). Moreover, AZ505 fails to inhibit the enzymatic activities of a panel of protein lysine methyltransferases. AZ505 is nominated for ITC binding study with K_d of 0.5 μ M. In contrast, the calculated K_d for the p53 substrate peptide is 3.7 μ M. AZ505 binding to SMYD2 is driven primarily by entropy, which often suggests that binding is mediated by hydrophobic interactions with few specific hydrogen bonds^[2].



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