

# UNC0321

Catalog No: tcsc2211



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

1238673-32-9

**Formula:**

$C_{27}H_{45}N_7O_3$

**Pathway:**

Epigenetics

**Target:**

Histone Methyltransferase

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 31$  mg/mL (60.11 mM)

**Observed Molecular Weight:**

515.69

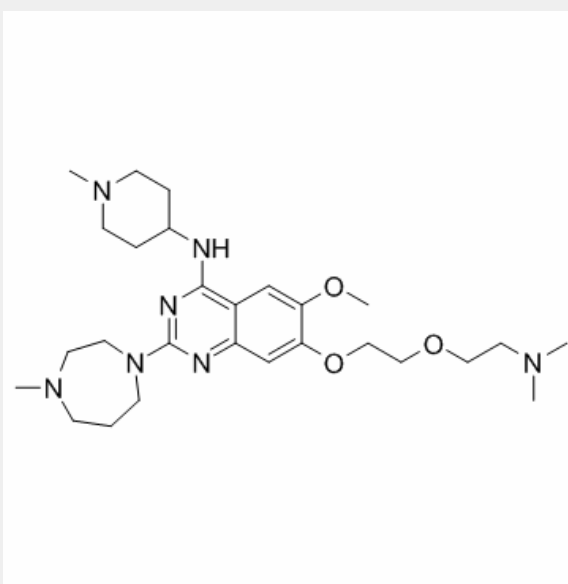
## Product Description

UNC0321 is a potent and selective G9a inhibitor with  $K_i$  of 63 pM, UNC0321 is the first G9a inhibitor with picomolar potency and the most potent G9a inhibitor to date.

IC50 value: 63 pM(Ki); 9 nM (ECSD assay) [1]

Target: G9a

It was found that replacing the 5-carbon chain in compound 13 with an ethoxyethyl chain resulted in compound 29{UNC0321} (IC50 = 6 nM (CLOT) and 9 nM (ECSD)), the most potent G9a inhibitor to date. 29 had a Morrison Ki of 63 pM and was about 40-fold more potent than 10 (Morrison Ki = 2.6 nM) and 250-fold more potent than 3a (Morrison Ki = 16 nM) in this G9a MCE assay. UNC0321 potentially useful small molecule tools for the biomedical research community to investigate the biology of G9a and its role in chromatin remodeling as well as PTMs of other proteins.



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