

UNC0638

Catalog #: 27222

Lot #: 121112

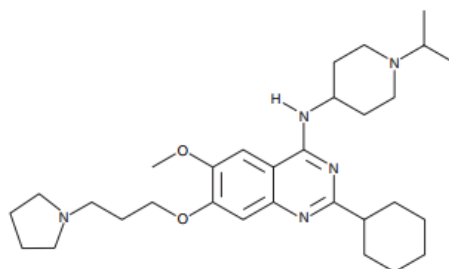
Size: 5 mg

Structure:

CAS Registry #: 1255580-76-7

Purity: ≥98%

Chemical Formula: C₃₀H₄₇N₅O₂



Molecular Weight: 509.7

Description: UNC0638 is a selective inhibitor of G9a and G9a-like protein (GLP), with IC₅₀'s in the very low (<20) nM range. It also exhibits very weak activity against JMJD2E (IC₅₀ ~4.5 μM), but the selectivity for G9a and GLP is over 200-fold. UNC0638 was inactive against SUV39H1, SUV39H2, EZH2, SETD7, MLL, SMYD3, DOT1L, SETD8, PRDM1, PRMT1 and PRMT3. UNC0638 exhibits only extremely weak inhibition of DNMT1 (IC₅₀ >100 μM).

Appearance: A crystalline solid

Solubility: Soluble in DMSO purged with an inert gas, then dilute into aqueous buffer just before use. Solubility in DMSO is 20 mg/ml. Do not store aqueous solutions for more than one day.

Biological Activity: UNC0638 inhibits G9a activity with an IC₅₀ value of <15 nM *in vitro*. It also inhibits GLP with an IC₅₀ value of 19 nM.

Storage/Stability: Store at or below -20 °C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

References:

1. Vedadi, M., *et al.* *Nat Chem Biol.* 2011 Jul 10; **7(8)**:566–574.
2. Tachibana, M., *et al.*, *Genes Dev.* 2002; **16**:1779-1791.
3. Wagschal, A., *et al.*, *Mol. Cell. Biol.* 2008; **28(3)**:1104-1113.
4. Thomas, L.R., *et al.*, *J. Immunol.* 2008; **181**:485-493.