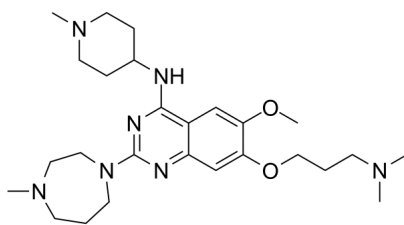


Certificate of Analysis

Catalog Number	BP14261
Product Name	UNC0224

Physical and Chemical Properties

CAS No.	1197196-48-7
Chemical Formula	C ₂₆ H ₄₃ N ₇ O ₂
Molecular Weight	485.677
Solubility	DMSO: 16 mg/mL (32.94 mM), Need ultrasonic
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	 <p>The chemical structure of UNC0224 is a complex molecule. It features a central benzene ring substituted with a methoxy group (-OCH₃) and a (4-(dimethylamino)ethoxy) group (-OCH₂CH₂CH₂N(CH₃)₂). This benzene ring is fused to a pyrimidine ring system. The pyrimidine ring has a (4-methylpiperidin-1-yl)amino group (-NH-CH₂CH₂CH₂CH₂N(CH₃)CH₂CH₂CH₂CH₂CH₂N(CH₃)) at position 2 and a (4-methylpiperidin-1-yl)methyl group (-CH₂CH₂CH₂CH₂N(CH₃)CH₂CH₂CH₂CH₂CH₂CH₂N(CH₃)) at position 6.</p>

Product Information

Description	UNC0224 is a selective inhibitor of G9a with a K _i of 2.6 nM and IC ₅₀ of 15 nM. UNC0224 also potently inhibits GLP with assay-dependent IC ₅₀ values of 20-58 nM.
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Targets&IC50	G9a:15 nM, G9a:2.6 nM K_i , G9a:23 nM K_d , GLP:20-58 nM
In vitro	In G9a ECSD and CLOT assays, the IC50 values are 43 nM and 57 nM for UNC0224, respectively. In GLP ECSD and CLOT assays, the IC50 values are 50 nM and 58 nM for UNC0224, respectively. UNC0224 is inactive against SET7/9, SET8/PreSET7, PRMT3, and JMJD2E. In ITC experiments, the Kd of UNC0224 to the G9a protein is 23 nM.

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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