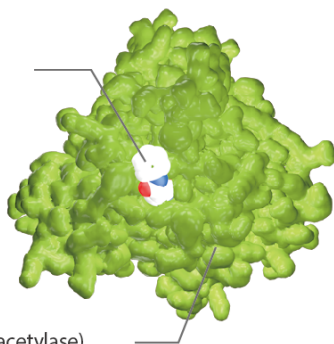


Histone Demethylase

HDAC Inhibitor:
Vorinostat (SAHA)



HDAC (Histone deacetylase)

There are two classes of enzymes involved in histone methylation: methyltransferases and demethylases. While methyltransferases are responsible for establishing methylation patterns, demethylases are capable of removing methyl groups not only from histones but other proteins as well. Histone demethylases not only target methylated sites on histone tails but also interact with methylated sites on non-histone proteins, such as p53.

Histone lysine demethylases (KDMs) are of interest as drug targets due to their regulatory roles in chromatin organization and their tight associations with diseases including cancer and mental disorders.

JMJD1A (also named KDM3A) is a demethylase that removes methyl from histone lysine H3K9. It plays important roles in various cellular processes, including spermatogenesis, energy metabolism, regulation of stem cell and gender display.

Jumonji domain-containing 3 (Jmjd3) has been identified as a histone demethylase, which specifically catalyzes the removal of methylation from H3K27me3.

Histone Demethylase Inhibitors & Modulators

<p>AS8351 (NSC51355) Cat. No.: HY-100744</p> <p>Bioactivity: AS8351 is a KDMSB inhibitor, which can induce and sustain active chromatin marks to facilitate the induction of cardiomyocyte-like cells.</p> <p>Purity: 99.70% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>CBB1003 Cat. No.: HY-15774</p> <p>Bioactivity: CBB1003 is a novel histone demethylase LSD1 inhibitor with IC50 of 10.54 uM.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 50 mg</p> 
<p>CBB1003 hydrochloride Cat. No.: HY-15774A</p> <p>Bioactivity: CBB1003 Hcl is a novel histone demethylase LSD1 inhibitor with IC50 of 10.54 uM.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 50 mg</p> 	<p>CBB1007 Cat. No.: HY-15313</p> <p>Bioactivity: CBB1007 is a cell-permeable amidino-guanidinium compound that acts as a potent, reversible and substrate competitive LSD1 selective inhibitor (IC50 = 5.27 uM for hLSD1).</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>CBB1007 hydrochloride Cat. No.: HY-15313B</p> <p>Bioactivity: CBB1007 Hcl is a cell-permeable amidino-guanidinium compound that acts as a potent, reversible and substrate competitive LSD1 selective inhibitor (IC50 = 5.27 uM for hLSD1).</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>CBB1007 trihydrochloride Cat. No.: HY-15313C</p> <p>Bioactivity: CBB1007 trihydrochloride is a cell-permeable amidino-guanidinium compound that acts as a potent, reversible and substrate competitive LSD1 selective inhibitor (IC50 = 5.27 uM for hLSD1).</p> <p>Purity: 96.58% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>Corin Cat. No.: HY-111048</p> <p>Bioactivity: Corin is a dual inhibitor of histone lysine specific demethylase (LSD1) and histone deacetylase (HDAC), with a K_i(inact) of 110 nM for LSD1 and an IC₅₀ of 147 nM for HDAC1.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 500 mg, 250 mg</p> 	<p>CPI-455 Cat. No.: HY-100421</p> <p>Bioactivity: CPI-455 is a specific KDMS inhibitor.</p> <p>Purity: 98.0% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 
<p>Daminozide Cat. No.: HY-13643</p> <p>Bioactivity: Daminozide(DMASA; DIMG; B 995), a plant growth regulator, selectively inhibits the KDM2/7 JmjC subfamily. IC50 Value: Target: KDM2/7 JmjC Inhibition of shoot elongation in dwarf and tall peas by the 1,1-dimethylhydrazide of succinic acid (B-995) was correlated with the inhibition of the oxidation of...</p> <p>Purity: 98.0% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 1 g, 5 g</p> 	<p>DDP-38003 dihydrochloride Cat. No.: HY-19612A</p> <p>Bioactivity: DDP-38003 dihydrochloride is a novel, orally available inhibitor of histone lysine-specific demethylase 1A (KDM1A/LSD1) with an IC₅₀ of 84 nM.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 

<p>DDP-38003 trihydrochloride</p> <p style="text-align: right;">Cat. No.: HY-19612B</p> <p>Bioactivity: DDP-38003 trihydrochloride is a novel, orally available inhibitor of histone lysine-specific demethylase 1A (KDM1A/LSD1) with an IC₅₀ of 84 nM.</p> <p>Purity: 98.74%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>GSK 690 Hydrochloride</p> <p style="text-align: right;">Cat. No.: HY-117226A</p> <p>Bioactivity: GSK 690 (Hydrochloride) is a reversible inhibitor of lysine specific demethylase 1 (LSD1), with a K_d value of 9 nM and a biochemical IC₅₀ of 37 nM.</p> <p>Purity: 99.78%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 
<p>GSK-J1</p> <p style="text-align: right;">Cat. No.: HY-15648</p> <p>Bioactivity: GSK-J1 is a potent inhibitor of H3K27me3/me2-demethylases JMJD3/KDM6B and UTX/KDM6A, with IC₅₀ of 60 nM towards KDM6B.</p> <p>Purity: 99.92%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg</p> 	<p>GSK-J1 lithium salt</p> <p style="text-align: right;">Cat. No.: HY-15648D</p> <p>Bioactivity: GSK-J1 lithium salt is a potent inhibitor of H3K27me3/me2-demethylases JMJD3/KDM6B and UTX/KDM6A, with IC₅₀ of 60 nM towards KDM6B.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10 mg, 50 mg</p> 
<p>GSK-J2</p> <p style="text-align: right;">Cat. No.: HY-15648A</p> <p>Bioactivity: GSK-J2 is an isomer of GSK-J1 that does not have any specific activity. GSK-J1 is a potent inhibitor of H3K27me3/me2-demethylases JMJD3/KDM6B and UTX/KDM6A.</p> <p>Purity: 98.82%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg</p> 	<p>GSK-J4</p> <p style="text-align: right;">Cat. No.: HY-15648B</p> <p>Bioactivity: GSK-J4 is a potent H3K27me3 histone lysine demethylase (KDM) inhibitor, with IC₅₀s of 8.6 μM and 6.6 μM against KDM6B and KDM6A, respectively.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg</p> 
<p>GSK-LSD1 Dihydrochloride</p> <p style="text-align: right;">Cat. No.: HY-100546A</p> <p>Bioactivity: GSK-LSD1 Dihydrochloride is a potent, selective and irreversible lysine specific demethylase 1 (LSD1) inhibitor with an IC₅₀ of 16 nM.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg</p> 	<p>GSK2879552</p> <p style="text-align: right;">Cat. No.: HY-18632</p> <p>Bioactivity: GSK2879552 is an orally available, irreversible inhibitor of lysine specific demethylase 1 (LSD1), with potential antineoplastic activity.</p> <p>Purity: 99.94%</p> <p>Clinical Data: Phase 2</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>IOX1</p> <p style="text-align: right;">Cat. No.: HY-12304</p> <p>Bioactivity: IOX1 is the most potent broad-spectrum inhibitor of 2OG oxygenases, including the JmjC demethylases; IC50 for KDM4A/KDM3A is 0.6/0.1 uM. IC50 value: 0.6/0.1 uM(KDM4A/KDM3A) [1] Target: JmjC KDMs inhibitor IOX1 is the most potent representative panel of 2OG oxygenases, including.</p> <p>Purity: 97.14%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> 	<p>JIB-04</p> <p style="text-align: right;">Cat. No.: HY-13953</p> <p>Bioactivity: JIB-04 is a pan-selective Jumonji histone demethylase inhibitor with IC₅₀s of 230, 340, 855, 445, 435, 1100, and 290 nM for JARID1A, JMJD2E, JMJD3, JMJD2A, JMJD2B, JMJD2C, and JMJD2D, respectively.</p> <p>Purity: 97.95%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg</p> 

<p>KDM4D-IN-1</p> <p style="text-align: right;">Cat. No.: HY-101928</p> <p>Bioactivity: KDM4D-IN-1 is a new histone lysine demethylase 4D (KDM4D) inhibitor with an IC₅₀ value of 0.41±0.03 μM.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>KDM5-IN-1</p> <p style="text-align: right;">Cat. No.: HY-100422</p> <p>Bioactivity: KDM5-IN-1 is a potent, selective and orally bioavailable KDM5 inhibitor with an IC₅₀ of 15.1 nM.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>KDM5A-IN-1</p> <p style="text-align: right;">Cat. No.: HY-100014</p> <p>Bioactivity: KDM5A-IN-1 is an inhibitor histone demethylases. Target: Histone Demethylase</p> <p>Purity: 99.76%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>KDOAM-25</p> <p style="text-align: right;">Cat. No.: HY-102047</p> <p>Bioactivity: KDOAM-25 is a potent and selective KDM5 inhibitor with IC₅₀s of 71, 19, 69, 69 nM for KDM5A, KDM5B, KDM5C, KDM5D, respectively.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 5 mg, 10 mg</p> 
<p>ML324</p> <p style="text-align: right;">Cat. No.: HY-12725</p> <p>Bioactivity: ML324 is a potent JMJD2 demethylase inhibitor with demonstrated antiviral activity.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg</p> 	<p>NCGC00244536 (KDM4B Inhibitor B3)</p> <p style="text-align: right;">Cat. No.: HY-101799</p> <p>Bioactivity: NCGC00244536 is a potent KDM4B inhibitor with an IC₅₀ of 10 nM.</p> <p>Purity: 98.57%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>NCGC00247743</p> <p style="text-align: right;">Cat. No.: HY-112308</p> <p>Bioactivity: NCGC00247743 is a histone lysine demethylase KDM4 inhibitor.</p> <p>Purity: 99.35%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg</p> 	<p>ORY-1001(trans)</p> <p style="text-align: right;">Cat. No.: HY-12782T</p> <p>Bioactivity: ORY-1001 trans is a selective irreversible lysine (K)-specific demethylase 1A (KDM1A/ LSD1) inhibitor.</p> <p>Purity: 99.14%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in Water, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p>QC6352</p> <p style="text-align: right;">Cat. No.: HY-104048</p> <p>Bioactivity: QC6352 is a potent KDM4C inhibitor with an IC₅₀ of 35 nM.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 	<p>S 2101</p> <p style="text-align: right;">Cat. No.: HY-110277</p> <p>Bioactivity: S 2101 is a lysine-specific demethylase 1 (LSD1) inhibitor with an IC₅₀ of 0.99 μM, K_i of 0.61 μM and K_{inact}/K_i of 4560 M/s.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 5 mg, 10 mg, 25 mg</p> 

