LIFE SCIENCE

TCI

Epigenetics Research Reagents

It has been revealed that cells memorize information and regulate gene expession regardless of the gene sequences at the stages of growth and differentiation. The research about DNA methylation and Histone modification related to the epigenetic mechanism is expected to be applied to cancer treatment or regenerative treatment.

DNA Methylation Inhibitors

Zebularine (>98.0%)	200mg / 1g [Z0022]
RG 108 (>98.0%)	50mg / 200mg [P2023]
5-Azacytidine (>98.0%)	100mg / 1g [A2033]
5-Aza-2'-deoxycytidine	20mg / 100mg [A2232]
Genistein (>98.0%)	100mg / 1g [G0272]
Procaine Hydrochloride (>98.0%)	25g / 100mg [A1163]
(-)-Epigallocatechin Gallate Hydrate (>98.0%)	100mg / 100mg [E0694]
Caffeic Acid (>98.0%)	5g / 25g [C0002]
Chlorogenic Acid Hydrate (>98.0%)	1g / 5g [C0181]
Hydralazine Hydrochloride (>99.0%)	5g / 25g [H0409]

Histone Deacetylase (HDAC) Inhibitors

T 247 [1] (>95.0%)	5mg [A2897]
CC-149 [2] (>96.0%)	5mg [H1340]
Vorinostat (=SAHA) (>98.0%)	200mg [H1388]
Acetyldinaline (>98.0%)	10mg / 50mg [A2501]
M 344 (>97.0%)	20mg / 100mg [D4188]
Splitomicin (>98.0%)	200mg / 1g [S0892]
Trichostatin A (>98.0%)	10mg / 50mg [T2477]
Sodium Butyrate (>98.0%)	25g / 100g [S0519]
Valproic Acid (>99.0%)	25mL / 100mL / 500mL [P0823]
Valproic Acid Sodium Salt (>98.0%)	25g / 100g [S0894]
Butein (>98.0%)	100mg / 1g [B3803]
Quercetin Hydrate (>96.0%)	25g [P0042]
Piceatannol (>98.0%)	100mg / 1g [P1928]
Resveratrol (>98.0%)	1g / 5g / 25g [R0071]
New **Belinostat** (>98.0%)	25mg / 100mg [B5888]
New **Cambinol** (>98.0%)	5mg / 25g [C3535]
EX-527 (>98.0%)	25mg [C2739]
(-)-Trichostatin A (>98.0%)	10mg [T3633]

Histone Demethylase Inhibitors

NCDM-32b [3] (>97.0%)	5mg [D4078]
NCDM-64 [4] (>80.0%)	5mg [C3134]
BIX 01294 Trihydrochloride Hydrate (>85.0%)	25mg [B4211]
PCA Hydrate (>98.0%)	5g [P0553]
Daminozide (>98.0%)	5g / 25g [D4015]
PCA (>98.0%)	5g / 25g [P2416]

Methylated Nucleosides

2'-Deoxy-5-(hydroxymethyl)cytidine (= 5-hmdC) (>98.0%)	50mg / 200mg [D4220]
2'-Deoxy-5-methylcytidine (= 5-mdC) (>98.0%)	100mg / 500mg / 5g [D3610]
5-Methylcytidine (>98.0%)	1g [M1931]

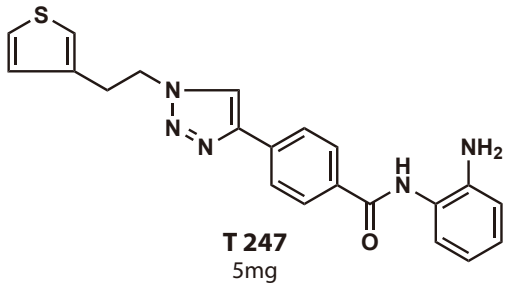
[1) 2) 3)] These products are commercialized under instruction by Professor Naoki Miyata *et al.*, Nagoya City University, Japan.

1) N. Miyata *et al., Angew. Chem. Int. Ed.* **2010**, *49*, 6817.
2) N. Miyata *et al., J. Am. Chem. Soc.* **2009**, *131*, 17536.
3) N. Miyata *et al., J. Med. Chem.* **2010**, *53*, 5629.

For Laboratory Use, Research Purpose Only.

Epigenetics Research Reagents

Histone Deacetylase 3 (HDAC3) Selective Inhibitor

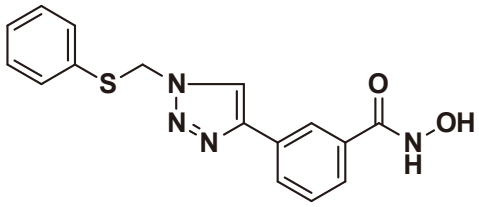


T 247
5mg
[A2897]

Histone Deacetylase 3 (HDAC3) is highly expressed in human colon cancer cells and prostate cancer cells. The assays using human colon cancer HCT116 and prostate cancer PC-3 cell lines have revealed that T 247 shows cell growth-inhibitory activity. In addition, it has been reported that the HDAC3 inhibition by T 247 activated HIV gene expression in latent HIV-infected cells.

T. Suzuki, N. Miyata *et al., PLoS One* **2013**, *8*, e68669.

Histone Deacetylase 8 (HDAC8) Selective Inhibitor

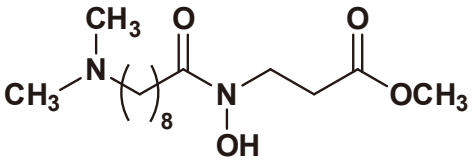


NCC-149
5mg
[H1340]

HDAC8, an isoform of histone deacetylase, has been reported to be implicated in T-cell lymphomas and neuroblastoma tumorigenesis. It is expected that **NCC-149** will be used as an epigenetics research tool and an anticancer agent because of its selective inhibitory activity of HDAC8 and tumor cell growth.

T. Suzuki, N. Miyata *et al., Angew. Chem. Int. Ed.* **2010**, *49*, 6817.
T. Suzuki, N. Miyata *et al., J. Med. Chem.* **2012**, *55*, 9562.

Jumonji Domain-containing Histone Demethylase (JHDM) Inhibitor

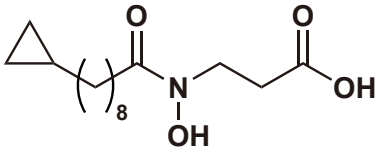


NCDM-32b
5mg
[D4078]

Jumonji domain-containing histone demethylase (JHDM) is an enzyme catalyzing the demethylation of the methylated lysine residue in histone, which regulates the expression of *Mdm2* oncogene and *p53* anti-oncogene. **NCDM-32b** forms NCDM-32 losing a methyl group of the ester moiety by hydrolytic degradation, and shows an inhibitory activity against JMJD2C, a kind of JHDM. NCDM-32 inhibits the growth of HCT116 colon cancer cells in combination with LSD1 inhibitor.

T. Suzuki, N. Miyata *et al., J. Med. Chem.* **2010**, *53*, 5629.

Histone Lysine Demethylases (KDM2/7) Inhibitor



NCDM-64
5mg
[C3134]

NCDM-64 selectively inhibits KDM2/7, a histone demethylase. It has been reported that KDM subfamilies, KDM2, KDM4, KDM5 and KDM7 are implicated in tumorigenesis. It is expected that NCDM-64 will be used as an anticancer agent.

T. Suzuki, N. Miyata *et al., J. Med. Chem.* **2013**, *56*, 7222.

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