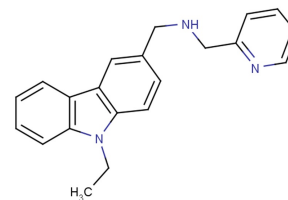


CMP-5

Chemical Properties

CAS No.:	880813-42-3
Formula:	C ₂₁ H ₂₁ N ₃
Molecular Weight:	315.41
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	CMP-5 is a potent and selective PRMT5 inhibitor, while displays no activity against PRMT1/4/7 enzymes. It selectively blocks S2Me-H4R3 by inhibiting PRMT5 methyltransferase activity on histone preparations.
Targets(IC ₅₀)	mTh1 cells: 3.7 μ M mTh2 cells: 9.2 μ M hTh1 cells: 26.9 μ M hTh2 cells: 31.6 μ M
In vitro	CMP-5 (0-100 μ M; 24-72 hours) is selectively toxic to lymphoma cells but shows limited toxicity to normal resting B lymphocytes even after prolonged incubation. CMP-5 (0-40 μ M; 24 hours) preferentially suppresses the proliferation of human Th1 cells over Th2 cells (43 versus 9% inhibition, respectively). The sensitivity of Th1 cells over Th2 cells to PRMT5 inhibition is different, the IC ₅₀ values are 26.9 μ M and 31.6 μ M in human Th1 cells and Th2 cells, respectively. CMP-5 (40 μ M; 24 hours) decreases p-BTK and pY(416)SRC expression in 60A cells when it compares to the DMSO-treated group. CMP-5 (25 μ M; 24 hours) alone inhibits mouse Th1 cell proliferation by 91%, when added different doses IL-2, IL-2 enhances proliferation and reaches a peak at 5 ng/ml [1].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.17 mL	15.852 mL	31.705 mL
5 mM	0.634 mL	3.17 mL	6.341 mL
10 mM	0.317 mL	1.585 mL	3.17 mL
50 mM	0.063 mL	0.317 mL	0.634 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Alinari L, et al. Selective inhibition of protein arginine methyltransferase 5 blocks initiation and maintenance of B-cell transformation. *Blood*. 2015 Apr 16;125(16):2530-43.
2. Webb LM, et al. PRMT5-Selective Inhibitors Suppress Inflammatory T Cell Responses and Experimental Autoimmune Encephalomyelitis. *J Immunol*. 2017 Feb 15;198(4):1439-1451.

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