# PRODUCT INFORMATION



**DC-05** 

Item No. 36584

CAS Registry No.: 890643-16-0

Formal Name:  $\alpha$ -[[[2-(1H-indol-3-yl)ethyl]amino]

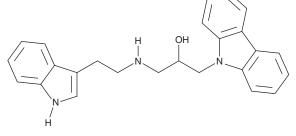
methyl]-9H-carbazole-9-ethanol

MF:  $C_{25}H_{25}N_3O$ FW: 383.5 **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 223, 235, 261, 292 nm

Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



## **Laboratory Procedures**

DC-05 is supplied as a solid. A stock solution may be made by dissolving the DC-05 in the solvent of choice, which should be purged with an inert gas. DC-05 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of DC-05 in these solvents is approximately 11 and 12 mg/ml, respectively. DC-05 is slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of DC-05 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of DC-05 in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

DC-05 is an inhibitor of DNA methyltransferase 1 (DNMT1;  $IC_{50} = 10.3 \mu M$ ).<sup>1</sup> It is selective for DNMT1 over DNMT3A and DNMT3B ( $IC_{50}s = >200~\mu M$ ), as well as the additional methyltransferases G9a, SUV39H1, MLL1, SET7/9, and PRMT1 ( $IC_{50}s = >150, >150, >150, >150, and 37.1~\mu M$ , respectively). DC-05 (2.5-10 μM) reduces proliferation of HCT116 colon cancer cells.

### Reference

1. Chen, S., Wang, Y., Zhou, W., et al. Identifying novel selective non-nucleoside DNA methyltransferase 1 inhibitors through docking-based virtual screening. J. Med. Chem. 57(21), 9028-9041 (2014).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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