

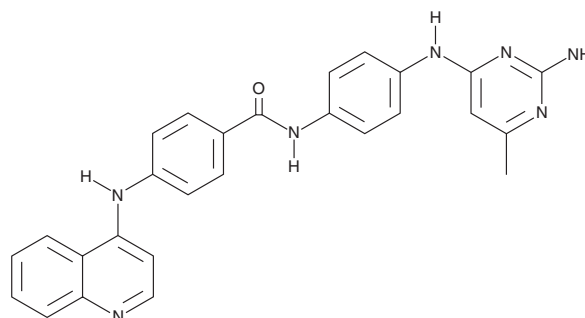
# PRODUCT INFORMATION



## SGI-1027

Item No. 11165

**CAS Registry No.:** 1020149-73-8  
**Formal Name:** N-[4-[(2-amino-6-methyl-4-pyrimidinyl)amino]phenyl]-4-(4-quinolinylamino)-benzamide  
**Synonym:** DNA Methyltransferase Inhibitor II  
**MF:** C<sub>27</sub>H<sub>23</sub>N<sub>7</sub>O  
**FW:** 461.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 350 nm  
**Supplied as:** A crystalline 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

SGI-1027 is supplied as a crystalline solid. A stock solution may be made by dissolving the SGI-1027 in the solvent of choice, which should be purged with an inert gas. SGI-1027 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of SGI-1027 in these solvents is approximately 5 mg/ml.

SGI-1027 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SGI-1027 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SGI-1027 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

SGI-1027 is an inhibitor of the DNA methyltransferases DNMT1, DNMT3A, and DNMT3B (IC<sub>50</sub>s = 12.5, 8, and 7.5 μM, respectively, with Poly(dI-dC) as the substrate).<sup>1</sup> It has been shown to cause the degradation of DNMT1 and to reactivate silenced tumor suppressor genes by reducing CpG island hypermethylation.<sup>1</sup>

### Reference

1. Datta, J., Ghoshal, K., Denny, W.A., *et al.* A new class of quinoline-based DNA hypomethylating agents reactivates tumor suppressor genes by blocking DNA methyltransferase 1 activity and inducing its degradation. *Cancer Res.* **69(10)**, 4277-4285 (2009).

#### WARNING

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

#### SAFETY DATA

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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM