

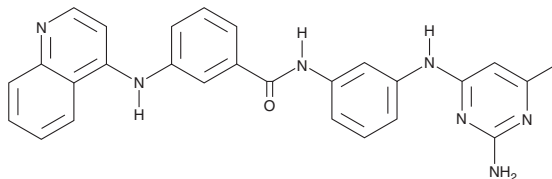
# PRODUCT INFORMATION



**MC3343**

Item No. 43331

**CAS Registry No.:** 1535187-91-7  
**Formal Name:** N-[3-[(2-amino-6-methyl-4-pyrimidinyl)amino]phenyl]-3-(4-quinolinylamino)-benzamide  
**MF:** C<sub>27</sub>H<sub>23</sub>N<sub>7</sub>O  
**FW:** 461.5  
**Purity:** ≥98%  
**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

MC3343 is supplied as a solid. A stock solution may be made by dissolving the MC3343 in the solvent of choice, which should be purged with an inert gas. MC3343 is sparingly soluble (1-10 mg/ml) in DMSO.

## Description

MC3343 is a DNA methyltransferase (DNMT) inhibitor (IC<sub>50</sub>s = 9 and 2.8 μM for DNMT1 and the DNMT3A2/DNMT3L complex, respectively).<sup>1</sup> It is selective for these DNMTs over protein arginine methyltransferase 1 (PRMT1) and G9a-like protein. MC3343 selectively decreases the viability of U937 and Raji lymphoma cells and PC3 prostate and MDA-MB-231 breast cancer cells over isolated peripheral blood mononuclear cells (PBMCs; IC<sub>50</sub>s = 4.3, 8.8, 6.6, 9.7, and 57.4 μM, respectively). *In vivo*, MC3343 (50 mg/kg) decreases tumor volume in a patient-derived xenograft (PDX) mouse model of osteosarcoma when used alone or in combination with doxorubicin (Item No. 15007).<sup>2</sup>

## References

1. Valente, S., Liu, Y., Schneckenger, M., *et al.* Selective non-nucleoside inhibitors of human DNA methyltransferases active in cancer including in cancer stem cells. *J. Med. Chem.* **57(3)**, 701-713 (2014).
2. Manara, M.C., Valente, S., Cristalli, C., *et al.* A quinoline-based DNA methyltransferase inhibitor as a possible adjuvant in osteosarcoma therapy. *Mol. Cancer Ther.* **17(9)**, 1881-1892 (2018).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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