



Product Information

Product ID S244081

CAS No. 1561178-17-3

Chemical Name

Synonym SGC-0946

Formula $C_{28}H_{40}BrN_7O_4$

Formula Wt. 618.6

Melting Point

Purity $\geq 98\%$

Solubility

Store Temp -20°C

Ship Temp Ambient

Description SGC0946 is a potent and selective inhibitor of DOT1L (Disruptor of Telomeric Silencing 1-Like), the only known methyltransferase that catalyzes mono-, di-, and trimethylation of histone H3 at lysine 79 (H3K79me1/2/3). H3K79 methylation is a mark associated with active gene transcription and is critically dysregulated in MLL-rearranged leukemias where DOT1L is aberrantly recruited to target genes. SGC0946 is a widely used chemical probe for investigating DOT1L-dependent transcriptional programs and epigenetic mechanisms in cancer.

Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
S244081	5 mg	\$115.00
S244081	25 mg	\$375.00

- References**
1. Daigle SR, Olhava EJ, Therkelsen CA, et al. Potent inhibition of DOT1L as treatment of MLL-fusion leukemia. *Blood*. 2013;122(6):1017-25. PMID: 23801631.
 2. Daigle SR, Olhava EJ, Therkelsen CA, et al. Selective killing of mixed lineage leukemia cells by a potent small-molecule DOT1L inhibitor. *Cancer Cell*. 2011;20(1):53-65. PMID: 21741596.
 3. Nguyen AT, Zhang Y. The diverse functions of Dot1 and H3K79 methylation. *Genes Dev*. 2011;25(13):1345-58. PMID: 21724828.
 4. Bernt KM, Zhu N, Sinha AU, et al. MLL-rearranged leukemia is dependent on aberrant H3K79 methylation by DOT1L. *Cancer Cell*. 2011;20(1):66-78. PMID: 21741597.
 5. Margueron R, Reinberg D. Chromatin structure and the inheritance of epigenetic information. *Nat Rev Genet*. 2010;11(4):285-96. PMID: 20300089.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.