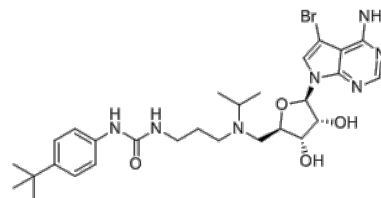


**Product Name** : SGC0946  
**Cat. No.** : PC-49325  
**CAS No.** : 1561178-17-3  
**Molecular Formula** : C<sub>28</sub>H<sub>40</sub>BrN<sub>7</sub>O<sub>4</sub>  
**Molecular Weight** : 618.577  
**Target** : Histone Methyltransferase (HMTase)  
**Solubility** : 10 mM in DMSO



## Biological Activity

SGC0946 (SGC-0946) is a potent, selective inhibitor of protein methyltransferase **DOT1L** with KD value of 0.06 nM and IC<sub>50</sub> of 0.3 nM, reduces the level of methylation of H3K79 in MCF10A cells with IC<sub>50</sub> of 8.8 nM.

SGC0946 is inactive against a panel of 12 protein methyltransferases (PMTs), DNMT1 and PRMT5. SGC0946 is more potent than EPZ004777.

SGC0946 reduced H3K79 methylation and proliferation of MYCN gene-amplified neuroblastoma cells.

SGC0946 displayed selective reduction of cell viability in an experimental leukaemia model derived from human cord blood cells transformed with the MLL-AF9 fusion oncogene, without apparent effect on the viability of cells transformed with an MLL-unrelated translocation (TLS-ERG).

SGC0946 (1 μM) effectively lowered the levels of MLL target genes, HOXA9 and Meis1.

## References

Yu W, et al. *Nat Commun*. 2012;3:1288.

Wong M, et al. *Cancer Res*. 2017 May 1;77(9):2522-2533.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com