

Product Data Sheet

Dot1L-IN-2

Cat. No.: HY-111390 CAS No.: 1940206-71-2 Molecular Formula: $C_{27}H_{24}N_8O$ Molecular Weight: 476.53

Target: Histone Methyltransferase

Pathway: Epigenetics

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Dot1L-IN-2 is a potent, selective and orally bioavailable inhibitor of Dot1L (a histone methyltransferase), with an IC $_{50}$ and K $_{i}$ of 0.4 nM and 0.08 nM, respectively.
IC ₅₀ & Target	IC50: $0.4 \mathrm{nM} (\mathrm{Dot1L})^{[1]}$ Ki: $0.08 \mathrm{nM} (\mathrm{Dot1L})^{[1]}$
In Vitro	Dot1L-IN-2 is a potent, selective Dot1L inhibitor, with an IC $_{50}$ and K $_{i}$ of 0.4 nM and 0.08 nM, respectively. Dot1L-IN-2 potently inhibits H3K79 dimethylation (IC $_{50}$, 16 nM), and blocks the activity of the HoxA9 promoter (IC $_{50}$, 340 nM) in cellular systems. Dot1L-IN-2 also dramatically suppresses proliferation of the human MLL-rearranged leukemia cell line MV4-11 carrying the oncogenic MLL-AF4 fusion (IC $_{50}$, 128 nM) $^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chen C, et al. Discovery of Novel Dot1L Inhibitors through a Structure-Based Fragmentation Approach. ACS Med Chem Lett. 2016 Jun 1;7(8):735-40.

Caution: Product has not been fully validated for medical applications. For research use only.

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