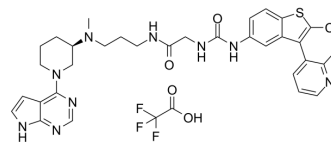


## Dot1L-IN-1 TFA

<b>Cat. No.:</b>	HY-101520A		
<b>Molecular Formula:</b>	C <sub>34</sub> H <sub>37</sub> ClF <sub>3</sub> N <sub>9</sub> O <sub>4</sub> S		
<b>Molecular Weight:</b>	760.23		
<b>Target:</b>	Histone Methyltransferase		
<b>Pathway:</b>	Epigenetics		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 50 mg/mL (65.77 mM; Need ultrasonic)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	1.3154 mL	6.5770 mL	13.1539 mL	
5 mM	0.2631 mL	1.3154 mL	2.6308 mL	
10 mM	0.1315 mL	0.6577 mL	1.3154 mL	

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Dot1L-IN-1 TFA is a highly potent and selective Dot1L inhibitor with a  $K_i$  of 2 pM and an  $IC_{50}$  of <0.1 nM. Dot1L-IN-1 TFA potently suppresses H3K79 dimethylation ( $IC_{50}$ =3 nM), as well as the activity of the HoxA9 promoter ( $IC_{50}$ =17 nM) in HeLa and Molm-13 cells, respectively<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

DOT1L

#### In Vitro

Dot1L-IN-1 (analogue 7) TFA effectively inhibits proliferation of the human MLL-rearranged leukemia cell line MV4-11 carrying the oncogenic MLL-AF4 fusion ( $IC_{50}$ =5 nM)<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Möbitz H, et al. Discovery of Potent, Selective, and Structurally Novel Dot1L Inhibitors by a Fragment Linking Approach. ACS Med Chem Lett. 2017 Feb 14;8(3):338-343.

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

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