## **Product** Data Sheet

## PDE5/HDAC-IN-1

Cat. No.: HY-147991

CAS No.: 2414921-48-3

Molecular Formula: C<sub>27</sub>H<sub>29</sub>BrN<sub>4</sub>O<sub>4</sub>

Molecular Weight: 553.45

Target: Phosphodiesterase (PDE); HDAC; Apoptosis

Pathway: Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Epigenetics; Apoptosis

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	PDE5/HDAC-IN-1 (Compound 26) is a potent phosphodiesterase 5 (PDE5) and HDAC inhibitor with IC <sub>50</sub> values of 46.3 nM and 14.5 nM, respectively. PDE5/HDAC-IN-1 induces cell apoptosis and shows anticancer activities <sup>[1]</sup> .			
IC <sub>50</sub> & Target	PDE5 46.3 nM (IC <sub>50</sub> )	HDAC6 0.11 μM (IC <sub>50</sub> )	HDAC8 0.12 μM (IC <sub>50</sub> )	HDAC1 2.45 μM (IC <sub>50</sub> )
In Vitro	PDE5/HDAC-IN-1 (Compound 26) shows growth inhibition with IC $_{50}$ values of 12.35, 7.19 and 11.79 $\mu$ M against HT-29, HCT-116 and SW-620 cells, respectively [1]. PDE5/HDAC-IN-1 shows cytotoxic activity with IC $_{50}$ values of 1.9, 1.5, 2.5, 5.5, 9.8, 18.6, 2 and 28.2 $\mu$ M against Molt 4, Sup-T1, K562, AGS, PC-3, LNCaP, T47D and CCD966SK, respectively [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

## **REFERENCES**

[1]. ElHady AK, et al. Extending the use of tadalafil scaffold: Development of novel selective phosphodiesterase 5 inhibitors and histone deacetylase inhibitors. Bioorg Chem. 2020 May;98:103742.

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

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