

## **Product** Data Sheet

Inhibitors

**Screening Libraries** 

**Proteins** 

## JMJD3/HDAC-IN-1

Molecular Weight:

**Cat. No.:** HY-156094

CAS No.: 2883046-06-6  $\label{eq:cas-noise} \mbox{Molecular Formula:} \qquad \mbox{$C_{21}$H}_{30}\mbox{$N_6$O}_2$ 

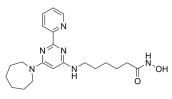
Target: HDAC; Histone Demethylase; Apoptosis

398.5

Pathway: Cell Cycle/DNA Damage; Epigenetics; Apoptosis

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

Analysis.



## **BIOLOGICAL ACTIVITY**

JMJD3/HDAC-IN-1 (compound A5b) is a dual inhibitor targeting Jumonji domain-containing protein demethylase 3 (JMJD3) and histone deacetylase (HADC1, IC<sub>50</sub>=16 nM). JMJD3/HDAC-IN-1 promotes hypermethylation of histone H3K27 and hyperacetylation of H3K9, and also cleaves caspase-7 and PARP to induce apoptosis. JMJD3/HDAC-IN-1 effectively inhibits cancer cell cloning, migration, and invasion<sup>[1]</sup>.

IC<sub>50</sub> & Target IC50: 16 nM (HDAC1), 534 nM (HDAC6)<sup>[1]</sup>

## **REFERENCES**

[1]. Li A, et al. Design, synthesis and biological evaluation of pyrimidine base hydroxamic acid derivatives as dual JMJD3 and HDAC inhibitors. Bioorg Med Chem Lett. 2023 Oct 1;94:129466...

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

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