Product Data Sheet

KDOAM-25 trihydrochloride

Cat. No.: HY-102047A

Molecular Weight: 416.77

Molecular Formula:

Target: Histone Demethylase

Pathway: **Epigenetics**

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

Analysis.

 $C_{15}H_{28}Cl_3N_5O_2$

HCI HCI HCI

BIOLOGICAL ACTIVITY

Description	KDOAM-25 trihydrochloride is a potent and highly selective histone lysine demethylases 5 (KDM5) inhibitor with IC ₅₀ s of 71 nM, 19 nM, 69 nM, 69 nM for KDM5A, KDM5B, KDM5C, KDM5D, respectively. KDOAM-25 trihydrochloride increases global H3K4 methylation at transcriptional start sites and impairs proliferation in multiple myeloma MM1S cells ^[1] .
IC ₅₀ & Target	IC50: 71 nM (KDM5A), 19 nM (KDM5B), 69 nM (KDM5C), 69 nM (KDM5D) ^[1]
In Vitro	KDOAM-25 trihydrochloride inhibits most potently KDM5B with an IC $_{50}$ of -50 μ M and the other KDM5 family members at concentrations above 100 μ M. KDOAM-25 trihydrochloride shows no cellular activity on any of the other tested JmjC family members [1]. KDOAM-25 trihydrochloride is able to reduce the viability of MM1S cells with an IC $_{50}$ of -30 μ M after a delay of 5-7 days [1]. KDOAM-25 trihydrochloride treatment results in a G1 cell-cycle arrest with an increased proportion of MM1S in G1 and a decrease of the proportion of cells in G2 without an increase in the proportion of cells in the apoptotic sub-G1 phase [1]. KDOAM-25 trihydrochloride (50 μ M) increases with approximately twice as much H3K4me3 in in multiple myeloma cells [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Tumber A, et al. Potent and Selective KDM5 Inhibitor Stops Cellular Demethylation of H3K4me3 at Transcription Start Sites and Proliferation of MM1S Myeloma Cells. Cell Chem Biol. 2017 Mar 16;24(3):371-380.

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

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