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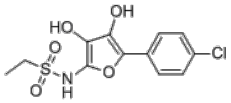
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	MO-I-500
Cat. No.	:	PC-72386
CAS No.	:	1585219-04-0
Molecular Formula	:	$C_{12}H_{12}ClNO_5S$
Molecular Weight	:	317.74
Target	:	Histone Demethylase
Solubility	:	10 mM in DMSO



Biological Activity

MO-I-500 is a pharmacological inhibitor of m6A demethylase **FTO**, inhibits purified FTO demethylase catalyzing demethylation with IC50 of 8.7 uM.
MO-I-500 treated cells exhibited a global increase in RNA methylation.
HeLa cells treated with 25 μM MO-I-500 for 24 hours showed a 9.3% increase in N6-methyl-adenosine content in total RNA.
MO-I-500 treatment caused a dramatic (>95%) inhibition in colony formation in SUM149-Luc cells.
MO-I-500 modulates various microRNA in treated (25uM) HeLa cells.
MO-I-500 treatment also led to decreased levels of FTO and IRX3 proteins in the SUM149 cells, with relatively little effect on cell growth.
MO-I-500 can strongly reduce the adverse effects of streptozotocin (STZ) model of AD in human astrocytoma CCF-STTG1 cells.

References

Guanqun Zheng, et al. ***ACS Chem Neurosci.*** 2014 Aug 20;5(8):658-65.

Singh B, et al. ***PLoS One***. 2016 Jul 8;11(7):e0159072.

Cockova Z, et al. ***ACS Chem Neurosci***. 2021 Oct 20;12(20):3818-3828.

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