

Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 ML324

 Cat. No.
 :
 PC-43163

 CAS No.
 :
 1222800-79-4

 Molecular Formula
 :
 C₂₁H₂₃N₃O₂

 Molecular Weight
 :
 349.4262

Target : Histone Demethylase Solubility : DMSO: ≥ 33 mg/mL

Biological Activity

ML324 is a potent, selective **JMJD2 demethylase (KDM4)** inhibitor with IC50 of 920 nM for JMJD2E, shows no activity against LSD1 (>100-fold selectivity), also inhibits the RNA binding activity of **PABPC1** with IC50 of 0.816 uM. ML324 causes depression-like phenotype even in absence of stress exposure, which is associated with an increase in transcriptionally repressive epigenetic marks H3K9me2/me3 in nucleus accumbens (NAc). ML324 blocks TNF- α -mediated neutrophil adhesion, reduces TNF- α -induced ICAM1 protein expression in cerebral microvessels.

References

Rai G, et al. Probe Reports from the NIH Molecular Libraries Program [Internet].

Pathak SS, et al. Neuropsychopharmacology. 2017 Mar;42(4):854-863.

Choi JY, et al. *Sci Rep.* 2017 Mar 22;7:45005.

Ishiguro K, et al. *Clin Immunol.* 2017 Jul;180:120-127.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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