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# Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

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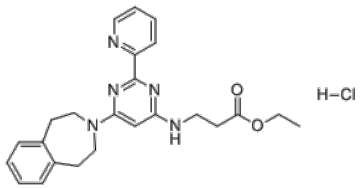
|---|---|---|
| **Product Name** | : | GSK-J4 |
| **Cat. No.** | : | PC-21211 |
| **CAS No.** | : | 1373423-53-0 |
| **Molecular Formula** | : | $C_{24}H_{28}ClN_5O_2$ |
| **Molecular Weight** | : | 453.97 |
| **Target** | : | Histone Demethylase |
| **Solubility** | : | 10 mM in DMSO |




## Biological Activity

GSK-J4 is a potent dual inhibitor of H3K27me3/me2-demethylases **JMJD3/KDM6B and UTX/KDM6A** with IC50s of 8.6 and 6.6 μM, respectively, GSK-J4 s a cell permeable prodrug of GSK-J1.
GSK-J4 inhibits LPS-induced TNF-α production in human primary macrophages with IC50 of 9 uM.
GSK-J4 prevents the JMJD3-induced loss of nuclear H3K27me3 immunostaining in Flag-JMJD3-transfected HeLa cells.
GSK-J4 inhibits JMJD3 expression that is induced by TGF-β1, inhibits H3K4 demethylation at Xist, Nodal, and HoxC13 in female embryonic stem cells.
GSK-J4 attenuates the development of kidney disease in diabetic mice.

## References

Kruidenier L, et al. ***Nature***. 2012 Aug 16;488(7411):404-8.

Majumder S, et al. ***J Clin Invest***. 2018 Jan 2;128(1):483-499.

Donas C, et al. ***J Autoimmun***. 2016 Dec;75:105-117.



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