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**Product Data Sheet**

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Product Name: GSK-J1 lithium salt

Cat. No.: GC36195

**Chemical Properties**

Cas. No.

SMILES [Li]OC(CCNC1=NC(C2=NC=CC=C2)=NC(N(CC3)CCC4=C3C=CC=C4)=C1)=OFormula C22H22LiN5O2 M.Wt 395.38

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

GSK-J1 is a highly potent inhibitor of H3K27 histone demethylase JMJD3 (KDM6B) and UTX (KDM6A) with IC50 of 60 nM in cell-free assays for JMJD3 (KDM6B) , respectively, >10-fold selectivity over other tested demethylases, with IC50 of 0.95µM and 1.76µM towards JARID1B/C.

In HEK-293 cells, GSK-J1 inhibits the activities of transiently transfected JMJD3 and UTX. GSK-J1 also inhibits TNF-α production by human primary macrophages by increasing total nuclear H3K27me3 levels. [1] In MC3T3-E1 cells, GSK-J1 suppresses Runx2 and Osterix expressions and ALP activity, and increases the global levels of H3K27me3. [2]

[1] Kruidenier L, et al. Nature. 2012, 488(7411), 404-408. [2] Yang D, et al. J Cell Biochem. 2015. doi: 10.1002/jcb.25210.

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

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