

Product Data Sheet

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)=O

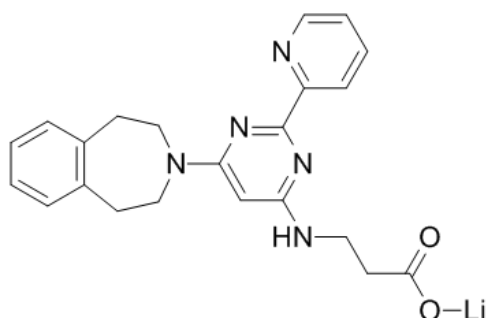
Formula C22H22LiN5O2 M.Wt 395.38

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



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

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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Background

GSK-J1 lithium salt is a potent inhibitor of H3K27me3/me2-demethylases JMJD3/KDM6B and UTX/KDM6A, with IC₅₀ of 60 nM towards KDM6B. IC₅₀: 60 nM (KDM6B)[2]

GSK-J1 is selective for H3K27 demethylases of the KDM6 subfamily and specifically binds to endogenous JMJD3. GSK-J1 inhibits TNF- α production by human primary macrophages in an H3K27-dependent manner[1]. GSK-J1 inhibits the demethylase activity of KDM5C with 8.5-fold increased potency compared with that of KDM5B at 1 mM α -ketoglutarate, with IC₅₀ of 11 μ M and 94 μ M, respectively[3].

[1]. Kruidenier L, et al. A selective jumonji H3K27 demethylase inhibitor modulates the proinflammatory macrophage response. *Nature*. 2012 Aug 16;488(7411):404-8. [2]. Heinemann B, et al. Inhibition of demethylases by GSK-J1/J4. *Nature*. 2014 Oct 2;514(7520):E1-2. [3]. Horton JR, et al. Characterization of a Linked Jumonji Domain of the KDM5/JARID1 Family of Histone H3 Lysine 4 Demethylases. *J Biol Chem*. 2016 Feb 5;291(6):2631-46.

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