

Product Data Sheet

Product Name: SKLB06489

Cat. No.: GC81481

Chemical Properties

Cas. No.

Formula C₂₅H₃₃N₅O

M.Wt 419.56

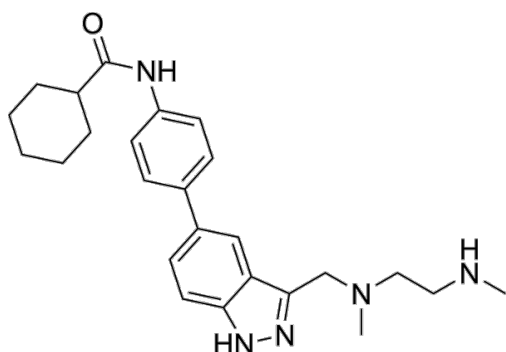
Solubility

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

SKLB06489 is a selective and orally active inhibitor of type I PRMT enzymes, with IC₅₀ values of 64.55 nM (PRMT1), 4.21 nM (PRMT6), and 51.27 nM (PRMT8). SKLB06489 inhibits cell proliferation, colony formation, DNA replication, and DNA damage repair in cancer cells. SKLB06489 induces G0/G1-phase cell cycle arrest and apoptosis in cancer cells. SKLB06489 enhances

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

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

Product Data Sheet

intracellular cholesterol efflux via ABCA1 and ABCG1 upregulation, disrupts cholesterol metabolic homeostasis, and suppresses tumor growth in subcutaneous xenograft models. SKLB06489 can be used for the research of triple-negative breast cancer (TNBC) [1].

In Vivo, SKLB06489 (40-80 mg/kg; i.g.; daily; 33 days) suppresses MDA-MB-231 tumor growth in vivo with a TGI of 58.4% at 80 mg/kg, inhibiting cell proliferation and inducing apoptosis^[1].

In Vitro, SKLB06489 (40 μ M; 8 h) selectively and stably binds to PRMT1 and PRMT6 in HEK293T cells, enhancing their thermal stability^[1]. SKLB06489 (5-7 days) dose-dependently inhibits proliferation of MDA-MB-231, Hs578T, and BT549 TNBC cells with IC₅₀ values in the low micromolar range^[1]. SKLB06489 (2.5-20 μ M; 12-14 days) dose-dependently inhibits colony formation in MDA-MB-231, Hs578T, and BT549 TNBC cells^[1]. SKLB06489 (2.5-10 μ M; 6 days) dose-dependently reduces ADMA levels in MDA-MB-231 and Hs578T TNBC cells, indicating inhibition of type I PRMT enzymatic activity in cells^[1]. SKLB06489 (5-20 μ M; 1-3 days) dose- and time-dependently inhibits DNA replication in MDA-MB-231, Hs578T, and BT549 TNBC cells^[1]. SKLB06489 (10 μ M; 24 h) impairs DNA damage repair in MDA-MB-231 and Hs578T TNBC cells, with a more pronounced effect than MS023 in Hs578T cells^[1]. SKLB06489 (5-20 μ M; 24 h) dose-dependently induces G0/G1 phase cell cycle arrest in MDA-MB-231, Hs578T, and BT549 TNBC cells^[1]. SKLB06489 (5-20 μ M; 72 h) dose-dependently induces apoptosis in MDA-MB-231, Hs578T, and BT549 TNBC cells^[1]. SKLB06489 (10 μ M; 4 days) upregulates ABCA1 and ABCG1 mRNA expression in MDA-MB-231 and Hs578T TNBC cells^[1]. SKLB06489 (5-10 μ M; 4 days) dose-dependently enhances cholesterol efflux (increasing medium cholesterol) and reduces intracellular cholesterol in MDA-MB-231 and Hs578T TNBC cells^[1]. SKLB06489 (5-10 μ M) upregulates ABCG1 protein levels in MDA-MB-231 and Hs578T TNBC cells^[1].

References:

[1]. Zhou SY, et al. Discovery of a potent and orally bioavailable type I PRMTs inhibitor for triple-negative breast cancer treatment. Acta Pharmacol Sin. Published online January 16, 2026.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

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