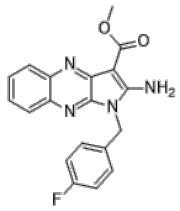
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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SKLB-11A
Cat. No.	:	PC-24824
CAS No.	:	433953-86-7
Molecular Formula	:	$C_{19}H_{15}FN_4O_2$
Molecular Weight	:	350.35
Target	:	Sirtuin
Solubility	:	10 mM in DMSO



CAS: 433953-86-7

Biological Activity

SKLB-11A is a specific, allosteric small molecule **SIRT3 activator**, directly targets and activates SIRT3 with EC50 of 21.95 uM, effectively binds to SIRT3 with SPR Kd of 4.7 uM.
SKLB-11A induces deacetylation at K122 and K68, resulting in enhanced MnSOD enzymatic activity in H9c2 cells.
SKLB-11A shows no binding to SIRT5 or SIRT6, displays some binding affinity for SIRT1 and SIRT2 (KD>200 μM), approximately 40 times lower than its affinity for SIRT3.
SKLB-11A binds to SIRT3 with high affinity and enhances its interaction with the p53-Ac substrate.
SKLB-11A (5-20 uM) improves mitochondrial function and induces autophagy/mitophagy in H9c2 cells.
SKLB-11A (10 or 20 mg/kg, ig) demonstrates cardioprotective effects in Dox-induced cardiotoxicity models in vivo.

References

Dan Zhang, et al. ***ACS Cent Sci***. 2025 Apr 14;11(5):704-718.

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

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