

Product Name	: GSK-3 β inhibitor 1
Synonyms	: —
Cat No.	: M22450
CAS Number	: 187325-53-7
Molecular Formula	: C ₁₄ H ₁₀ N ₂ O
Formula Weight	: 222.24
Chemical Name	: —
Description	GSK-3β inhibitor 1 is an inhibitor of GSK-3β (IC₅₀ of 4.9 nM) and demonstrates high antidiabetic efficacy. GSK-3β inhibitor 1 (compound 3a) inhibits GSK-3β with IC₅₀ 4.19 nM. In a cell-based assay 3a shows no significant leucocyte toxicity at 10 μM and is moderately cytotoxic against A549 cells. Compound 3a demonstrated high antidiabetic efficacy in obese streptozotocin-treated rats improving glucose tolerance at a dose of 50 mg/kg body weight thus representing an interesting lead for further optimization.
Pathway	: PI3K/Akt/mTOR signaling
Target	: GSK-3
Receptor	: GSK-3 β
Solubility	: DMSO : 30 mg/mL (134.99 mM; Need ultrasonic)
SMILES	: <chem>O=C1Nc2ccccc2C1=Clc1cccn1</chem>
Storage	: (-20°C)
Stability	: $\geq$ 2 years
Reference	:

1. Lozinskaya NA, et al. Synthesis and biological evaluation of 3-substituted 2-oxindole derivatives as new glycogen synthase kinase 3 β inhibitors. Bioorg Med Chem. 2019 May 1;27(9):1804-1817.