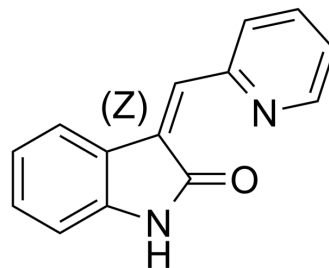


GSK-3β inhibitor 1

| | | | |
|---------------------------|--|-------|---------|
| Cat. No.: | HY-126144 | | |
| CAS No.: | 187325-53-7 | | |
| Molecular Formula: | C ₁₄ H ₁₀ N ₂ O | | |
| Molecular Weight: | 222.24 | | |
| Target: | GSK-3 | | |
| Pathway: | PI3K/Akt/mTOR; Stem Cell/Wnt | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 2 years |
| | | -20°C | 1 year |



SOLVENT & SOLUBILITY

| | | | | | |
|---|---|--------------------------|--------------|------------|------------|
| In Vitro | DMSO : 33.33 mg/mL (149.97 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 4.4996 mL | 22.4982 mL | 44.9964 mL |
| | | 5 mM | 0.8999 mL | 4.4996 mL | 8.9993 mL |
| 10 mM | | 0.4500 mL | 2.2498 mL | 4.4996 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (11.25 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|-------------------------------------|---|
| Description | GSK-3β inhibitor 1 (compound 3a) is a glycogen synthase kinase 3β (GSK-3β) inhibitor and demonstrates high antidiabetic efficacy, with an IC ₅₀ of 4.9 nM ^[1] . |
| IC₅₀ & Target | GSK-3β 4.9 nM (IC ₅₀) |

CUSTOMER VALIDATION

- J Enzyme Inhib Med Chem. 2023 Dec;38(1):2230388.

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- Drug Des Devel Ther. 2019 Jun 24;13:2057-2066.

See more customer validations on www.MedChemExpress.com

REFERENCES

[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.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA