# OSMI-4

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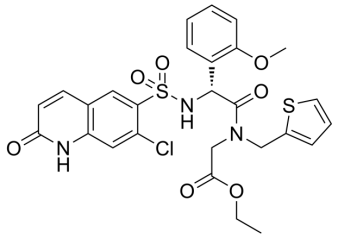
|---|---|
| **Cat. No.:** | HY-114361 |
| **CAS No.:** | 2260791-14-6 |
| **Molecular Formula:** | $C_{27}H_{26}ClN_3O_7S_2$ |
| **Molecular Weight:** | 604.09 |
| **Target:** | Acyltransferase |
| **Pathway:** | Metabolic Enzyme/Protease |
| **Storage:** | Powder -20°C 3 years<br>4°C 2 years<br>In solvent -80°C 2 years<br>-20°C 1 year |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 62.5 mg/mL (103.46 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 1.6554 mL | 8.2769 mL | 16.5538 mL |
| | 5 mM | 0.3311 mL | 1.6554 mL | 3.3108 mL |
| | 10 mM | 0.1655 mL | 0.8277 mL | 1.6554 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: ≥ 2.08 mg/mL (3.44 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (3.44 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

OSMI-4 is a low nanomolar O-GlcNAc transferase (OGT) inhibitor, with an $EC_{50}$ of 3 μM in cells.

**$IC_{50}$ & Target**

EC50: 3 μM (OGT)[1].

**In Vitro**

OSMI-4 (4b) is the best OGT inhibitor reported to date, with a ⊠3 μM $EC_{50}$ in cells, making it especially attractive for probing OGT's complex biology[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- J Biomed Sci. 2022 Feb 14;29(1):13.
- Acta Biomater. 2022 Aug 21;S1742-7061(22)00509-8.
- Cell Rep. 2023 Jul 14;42(7):112796.
- Burns Trauma. 08 October 2021.
- J Biol Chem. 2023 Jun 22;104950.

See more customer validations on www.MedChemExpress.com

## REFERENCES

[1]. Martin SES, et al. Structure-Based Evolution of Low Nanomolar O-GlcNAc Transferase Inhibitors. J Am Chem Soc. 2018 Oct 24;140(42):13542-13545.



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