

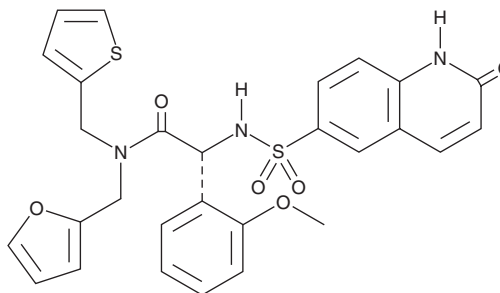
# PRODUCT INFORMATION



## OSMI-1

Item No. 21894

**CAS Registry No.:** 1681056-61-0  
**Formal Name:**  $\alpha$ R-[[[(1,2-dihydro-2-oxo-6-quinolinyl)sulfonyl]amino]-N-(2-furanylmethyl)-2-methoxy-N-(2-thienylmethyl)-benzeneacetamide]  
**MF:**  $C_{28}H_{25}N_3O_6S_2$   
**FW:** 563.6  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 245, 327 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ\text{C}$   
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

OSMI-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the OSMI-1 in the solvent of choice. OSMI-1 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of OSMI-1 in these solvents is approximately 20 mg/ml and 25 mg/ml, respectively.

OSMI-1 is sparingly soluble in aqueous buffers. OSMI-1 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

OSMI-1 is a quinolinone-6-sulfonamide that inhibits O-GlcNAc transferase (OGT;  $IC_{50} = 2.7 \mu\text{M}$ ) *in vitro*.<sup>1</sup> It is cell permeable and inhibits global O-GlcNAcylation in a dose-dependent manner in CHO cells. OSMI-1 induces a mass shift of nucleoporin62 (Nup62) that corresponds to the loss of O-GlcNAc residues and decreases levels of cellular O-GlcNAcase (OGA). OSMI-1 (50  $\mu\text{M}$ ) also causes a 50% decrease in CHO cell viability after 24 hours.

### Reference

1. Ortiz-Meoz, R.F., Jiang, J., Lazarus, M.B., *et al.* A small molecule that inhibits OGT activity in cells. *ACS Chem Biol.* **10**(6), 1392-1397 (2015).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/15/2024

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM