

#### OSMI-4

#Cat: NB-64-03681-1ml Size: 1 ml #Cat: NB-64-03681-1mg Size: 1 mg #Cat: NB-64-03681-5mg Size: 5 mg #Cat: NB-64-03681-10mg Size: 10 mg #Cat: NB-64-03681-25mg Size: 25 mg #Cat: NB-64-03681-50mg Size: 50 mg Size: 100 mg #Cat: NB-64-03681-100mg Size: 500 mg #Cat: NB-64-03681-500mg

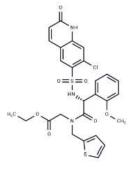
### **Chemical Properties:**

**CAS No:** 2260791-14-6 **Formula:** C<sub>27</sub>H<sub>26</sub>CIN<sub>3</sub>O<sub>7</sub>S<sub>2</sub>

Molecular Weight: 604.09

**Appearance:** no data available

**Storage:** Powder: -20°C for 3 years | In solvent: -80°C for 1 year



# **Biological Description:**

Description	OSMI-4 is a low nanomolar O-GlcNAc transferase (OGT) inhibitor (EC50 of 3 $\mu M$ in cells) that				
	can be used to study OGT inhibition in different human cell lines.				
Targets (IC50)	Others				
In vitro	<b>METHODS:</b> HEK293T cells were treated with OSMI-4 (10 μM, 2 hours) and quantitative PCR was				
	performed using primers for the OGT retained intron (intron 4) and spliced exon (exon 4).				
	<b>RESULTS</b> The bar graph shows that OSMI-4 increases retained intron splicing. [1] <b>METHO</b>				
	HEK293T cells were treated with OSMI-4 (20, 50 μM, 24 hours); HEK293T cells were treated w				
	OSMI-4 (0.1, 1, 5, 5, 10, 20 μM, 2, 24, 48 hours); Western blot analysis of total O-GlcNAc				
	performed. <b>RESULTS</b> O-GlcNAc levels were reduced to a greater extent following OSMI-4				
	treatment; 24 hours of OSMI-4 treatment of HEK293T cells resulted in a dose-dependent decrease				
	in O-GlcNAc levels, with effects seen with only 5 $\mu M$ of compound treatment, and these effects				
	could be observed in as little as 2 hours or 48 hours. [1]				

## **Solubility Information:**

Solubility	DMSO: 45 mg/mL (74.49 mM),Sonication is recommended.		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)		



### **Preparing Stock Solutions**

	1mg	5mg	10mg
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
50 mM	0.0331 mL	0.1655 mL	0.3311 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

#### Reference

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.

 $Inhibitor \cdot Natural\ Compounds \cdot Compound\ Libraries \cdot Recombinant\ Proteins$  This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use