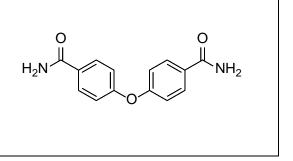
# **Product data sheet**



MedKoo Cat#: 561162				
Name: OUL35				
CAS: 6336-34-1				
Chemical Formula: $C_{14}H_{12}N_2O_3$				
Exact Mass: 256.0848				
Molecular Weight: 256.261				
Product supplied as:	Powder			
Purity (by HPLC):	$\geq 98\%$			
Shipping conditions	Ambient temperature			
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.			
-	In solvent: -80°C 3 months; -20°C 2 weeks.			



### 1. Product description:

OUL35, also known as NSC39047, is a selective PARP-10 inhibitor, and small-molecule ARTD10 inhibitor. OUL35 has been shown to rescue cells from ARTD10-induced cell death.

#### 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

#### 3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	5.0	19.51
DMSO	46.32	180.75
DMSO:PBS (pH 7.2)	0.20	0.78
(1:4)		

#### 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.90 mL	19.51 mL	39.02 mL
5 mM	0.78 mL	3.90 mL	7.80 mL
10 mM	0.39 mL	1.95 mL	3.90 mL
50 mM	0.08 mL	0.39 mL	0.78 mL

### 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

# 6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Tian Y, Korn P, Tripathi P, Komnig D, Wiemuth D, Nikouee A, Classen A, Bolm C, Falkenburger BH, Lüscher B, Gründer S. The mono-ADP-ribosyltransferase ARTD10 regulates the voltage-gated K+ channel Kv1.1 through protein kinase C delta. BMC Biol. 2020 Oct 15;18(1):143. doi: 10.1186/s12915-020-00878-1. PMID: 33059680; PMCID: PMC7558731.

2. Venkannagari H, Verheugd P, Koivunen J, Haikarainen T, Obaji E, Ashok Y, Narwal M, Pihlajaniemi T, Lüscher B, Lehtiö L. Small-Molecule Chemical Probe Rescues Cells from Mono-ADP-Ribosyltransferase ARTD10/PARP10-Induced Apoptosis and Sensitizes Cancer Cells to DNA Damage. Cell Chem Biol. 2016 Oct 20;23(10):1251-1260. doi: 10.1016/j.chembiol.2016.08.012. Epub 2016 Sep 22. PMID: 27667561.

In vivo study

TBD

## 7. Bioactivity

Biological target:

OUL35 (NSC39047) is a potent and selective inhibitor of ARTD10 (PARP-10), with an IC<sub>50</sub> of 329 nM.

# **Product data sheet**



In vitro activity

The treatment of HeLa cells overexpressing ARTD10 with OUL35 resulted in a complete rescue of cell proliferation. Notably, the inactive analogs OUL77 and OUL78 were ineffective and did not facilitate colony formation (Figures 3A and 3B). Together, these findings provide evidence that OUL35 enters cells and inhibits the catalytic activity of ARTD10 in a dose-dependent manner with an IC50 of 1.35  $\mu$ M (Figure 3C). To further substantiate this, this study performed cellular thermal shift assays (CETSA) showing that endogenous ARTD10 in U2OS cells is stabilized by OUL35 (Figure 3D).

Reference: Cell Chem Biol. 2016 Oct 20;23(10):1251-1260. https://pubmed.ncbi.nlm.nih.gov/27667561/

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.