# **Amelparib**

Cat. No.: HY-116218 CAS No.: 1227156-72-0 Molecular Formula:  $C_{19}H_{25}N_3O_3$ Molecular Weight: 343.42 PARP Target:

Pathway: Cell Cycle/DNA Damage; Epigenetics

Storage: Powder

2 years

3 years

-80°C In solvent 6 months

-20°C

-20°C 1 month

**Product** Data Sheet

# **SOLVENT & SOLUBILITY**

## In Vitro

DMSO: 100 mg/mL (291.19 mM; ultrasonic and warming and adjust pH to 2 with 1M HCl and heat to 80°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9119 mL	14.5594 mL	29.1189 mL
	5 mM	0.5824 mL	2.9119 mL	5.8238 mL
	10 mM	0.2912 mL	1.4559 mL	2.9119 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: 5 mg/mL (14.56 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5 mg/mL (14.56 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description

Amelparib is a potent, orally active, and water-soluble inhibitor of PARP-1. Amelparib inhibits PARP-1 activity (IC<sub>50</sub> =18.5 nmol/L) and cellular PAR formation (IC<sub>50</sub> =10.7 nmol/L) in the nanomolar range. Amelparib is a potential neuroprotective agent. Amelparib has the potential for the research of acute ischaemic stroke $^{[1]}$ .

## **REFERENCES**

[1]. Kim Y, et al. Neuroprotective effects of a novel poly (ADP-ribose) polymerase-1 inhibitor, JPI-289, in hypoxic rat cortical neurons. Clin Exp Pharmacol Physiol. 2017;44(6):671-679.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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