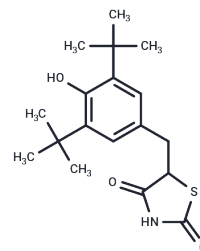


NL-1

## Chemical Properties

CAS No. : 188532-26-5  
 Formula: C<sub>18</sub>H<sub>25</sub>NO<sub>3</sub>  
 Molecular Weight: 335.46  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
*Actual storage temperature shall be subject to the COA.*



## Biological Description

Description	NL-1, a mitoNEET inhibitor, exhibits antileukemic effects.
Targets(IC50)	Mitochondrial Metabolism, Autophagy
In vitro	NL-1 Reduced the number of viable cells in REH, REH/Ara-C and ALL (SUP-B15, TOM-1, JM1, NALM-1, NALM-6, BV-173) cell lines, in a concentration-dependent manner.
In vivo	NL-1 showed antileukemic activity in an in vivo mouse ALL model
Cell Research	Cell Line: REH, REH/Ara-C and ALL (SUP-B15, TOM-1, JM1, NALM-1, NALM-6, BV-173) cell lines. Concentration: 10 μM, 20 μM, 30 μM, 40 μM, 50 μM, 60 μM, 70 μM, 80 μM, 100 μM. Incubation Time: 72 hours
Animal Research	Animal Model: 10 female NOD.Cg-Prkdcscid Il2rgtm1Wjl/SzJ (NSG) mice (6-8 month old) injected with TOM-1 ALL cells. Dosage: 10 mg/kg. Administration: Intraperitoneal injection; daily; for 5 days

## Solubility Information

Solubility	DMSO: 250 mg/mL (745.25 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (29.81 mM), Solution. 10% DMSO+90% Saline: < 10 mg/mL (29.81 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.981 mL	14.9049 mL	29.8098 mL
5 mM	0.5962 mL	2.981 mL	5.962 mL
10 mM	0.2981 mL	1.4905 mL	2.981 mL
50 mM	0.0596 mL	0.2981 mL	0.5962 mL

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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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Geldenhuis WJ, et al. The MitoNEET Ligand NL-1 Mediates Antileukemic Activity in Drug-Resistant B-Cell Acute Lymphoblastic Leukemia. J Pharmacol Exp Ther. 2019 Jul;370(1):25-34.

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