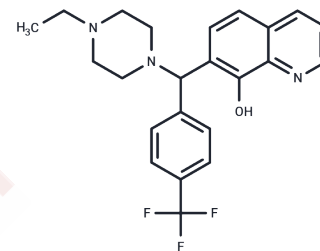


## ML311

## Chemical Properties

CAS No. :	315698-17-0
Formula:	C <sub>23</sub> H <sub>24</sub> F <sub>3</sub> N <sub>3</sub> O
Molecular Weight:	415.45
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	ML311 is a selective inhibitor of the Mcl-1/Bim interaction.
Targets(IC50)	Bcl-2 Family
In vitro	ML311 potently halts the viability of several Mcl-1 primed cells, including MCL-1-1780 (EC50: 0.31 $\mu$ M), NCI-H929 (EC50: 1.6 $\mu$ M), and DHL-6 (EC50: 3.3 $\mu$ M), with a high maximal effect (>80%). Additionally, ML311 displays activity in a leukemia-derived cell line reliant on Bcl-2 function (Bcl2-1863, EC50: 1.1 $\mu$ M). ML311 exhibits strong growth inhibitory effects in numerous cell lines, with GI50<900 nM for nine cell types (RPMI-8226, SR, NCI-H322M, NCI-H60, HCC-2998, KM12, SF-295, U251, PC-3), and <2 $\mu$ M for 14 additional types[1].

## Solubility Information

Solubility	DMSO: 50 mg/mL (120.35 mM),Sonication is recommended. H2O: Insoluble, Ethanol: 20 mg/mL (48.14 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: 2 mg/mL (4.81 mM),Sonication is recommended. <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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	1mg	5mg	10mg
1 mM	2.407 mL	12.0351 mL	24.0703 mL
5 mM	0.4814 mL	2.407 mL	4.8141 mL
10 mM	0.2407 mL	1.2035 mL	2.407 mL
50 mM	0.0481 mL	0.2407 mL	0.4814 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

Bannister T, et al. ML311: A Small Molecule that Potently and Selectively Disrupts the Protein-Protein Interaction of Mcl-1 and Bim: A Probe for Studying Lymphoid Tumorigenesis. Biotechnology Information (US); 2010-2012 Apr 16.

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