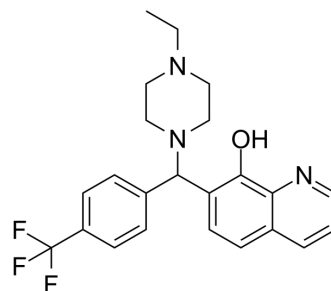


ML311

Cat. No.:	HY-101778		
CAS No.:	315698-17-0		
Molecular Formula:	C ₂₃ H ₂₄ F ₃ N ₃ O		
Molecular Weight:	415.45		
Target:	Bcl-2 Family		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 67.5 mg/mL (162.47 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.4070 mL	12.0351 mL	24.0703 mL
		5 mM	0.4814 mL	2.4070 mL	4.8141 mL
10 mM		0.2407 mL	1.2035 mL	2.4070 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.25 mg/mL (5.42 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.25 mg/mL (5.42 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.25 mg/mL (5.42 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	ML311 is a potent and selective inhibitor of the Mcl-1/Bim interaction.	
IC₅₀ & Target	Mcl-1	Bim
In Vitro	ML311 potently halts viability of several types of Mcl-1 primed cells, including MCL-1-1780 (EC ₅₀ =0.31 μM), DHL-6 (EC ₅₀ =3.3 μM), and NCI-H929 (EC ₅₀ =1.6 μM), with generally high maximal effect (>80%). ML311 also displays activity in a leukemia-derived cell line particularly reliant upon Bcl-2 function (Bcl2-1863, EC ₅₀ =1.1 μM). ML311 has strong growth inhibitory effects	

in many cell lines, with GI_{50} < 900 nM for nine cell types (RPMI-8226, SR, NCI-H322M, NCI-H60, HCC-2998, KM12, SF-295, U251, PC-3 cell lines), and < 2 μ M for 14 additional types^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

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