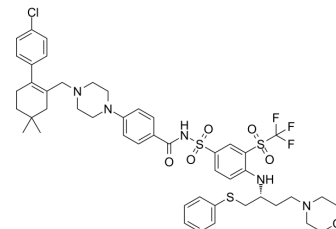


Navitoclax

Cat. No.:	HY-10087		
CAS No.:	923564-51-6		
Molecular Formula:	C ₄₇ H ₅₅ ClF ₃ N ₅ O ₆ S ₃		
Molecular Weight:	974.61		
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

DMF : ≥ 100 mg/mL (102.61 mM)
 DMSO : 75 mg/mL (76.95 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.0261 mL	5.1303 mL	10.2605 mL
	5 mM	0.2052 mL	1.0261 mL	2.0521 mL
	10 mM	0.1026 mL	0.5130 mL	1.0261 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% Ethanol >> 60% Phosal 50 PG >> 30% PEG400
Solubility: 7.5 mg/mL (7.70 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: 2.08 mg/mL (2.13 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.08 mg/mL (2.13 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (2.13 mM); Clear solution
- Add each solvent one by one: 45% PEG300 >> 5% Tween-80 >> 50% saline
Solubility: 2 mg/mL (2.05 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Navitoclax (ABT-263) is a potent and orally active Bcl-2 family protein inhibitor that binds to multiple anti-apoptotic Bcl-2

	family proteins, such as Bcl-x _L , Bcl-2 and Bcl-w, with a K _i of less than 1 nM ^[1] .		
IC₅₀ & Target	Bcl-W 1 nM (Ki)	Bcl-xL 1 nM (Ki)	Bcl-2 1 nM (Ki)
In Vitro	Navitoclax (ABT-263) is active against approximately one-half of the cell lines of the PPTP in vitro panel. The median IC ₅₀ for all of the lines in the panel is 1.91 μM ^[1] . Navitoclax in combination with chemotherapy agents leads most ovarian cancer cell lines a synergistic response, and enhances the caspase activation in both SK-OV-3 and IGROV-1 cell lines ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	Navitoclax (100 mg/kg; orally; 21-day treatment) enhances the activity of OSI-744 in vivo. As a single agent, 100 mg/kg Navitoclax alone dosed daily has no significant antitumor activity, whereas daily dosing of OSI-744 at 50 mg/kg results in significant tumor stasis (%TGI=52) during a 21-day treatment period. Notably, the combination of Navitoclax and OSI-744 dosed daily for 21 consecutive days results in 98% TGI and durable tumor regressions in 100% of treated tumor-bearing mice [3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
	Animal Model:	Mice with NCI-H1650 model ^[3]	
	Dosage:	100 mg/kg	
	Administration:	Orally; daily; for 21 consecutive days	
	Result:	As a single agent, 100 mg/kg alone dosed daily had no significant antitumor activity. Notably, the combination with OSI-744 resulted in 98% TGI and durable tumor regressions in 100% of treated tumor-bearing mice.	

CUSTOMER VALIDATION

- Cancer Cell. 2021 Jan 11;39(1):68-82.e9.
- Nat Genet. 2025 Jun;57(6):1478-1492.
- Cell Res. 2023 Jul;33(7):516-532.
- Cancer Res. 2025 Jan 2;85(1):32-51.
- Circ Res. 2025 Jan 17;136(2):e1-e19.

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REFERENCES

- [1]. Lock R1, et al. Initial testing (stage 1) of the BH3 mimetic ABT-263 by the pediatric preclinical testing program. *Pediatr Blood Cancer*. 2008 Jun;50(6):1181-1189.
- [2]. Wong M, et al. Navitoclax (ABT-263) reduces Bcl-x(L)-mediated chemoresistance in ovarian cancer models. *Mol Cancer Ther*. 2012 Apr;11(4):1026-1035.
- [3]. Chen J, et al. The Bcl-2/Bcl-X(L)/Bcl-w inhibitor, navitoclax, enhances the activity of chemotherapeutic agents in vitro and in vivo. *Mol Cancer Ther*. 2011 Dec;10(12):2340-9.

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

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