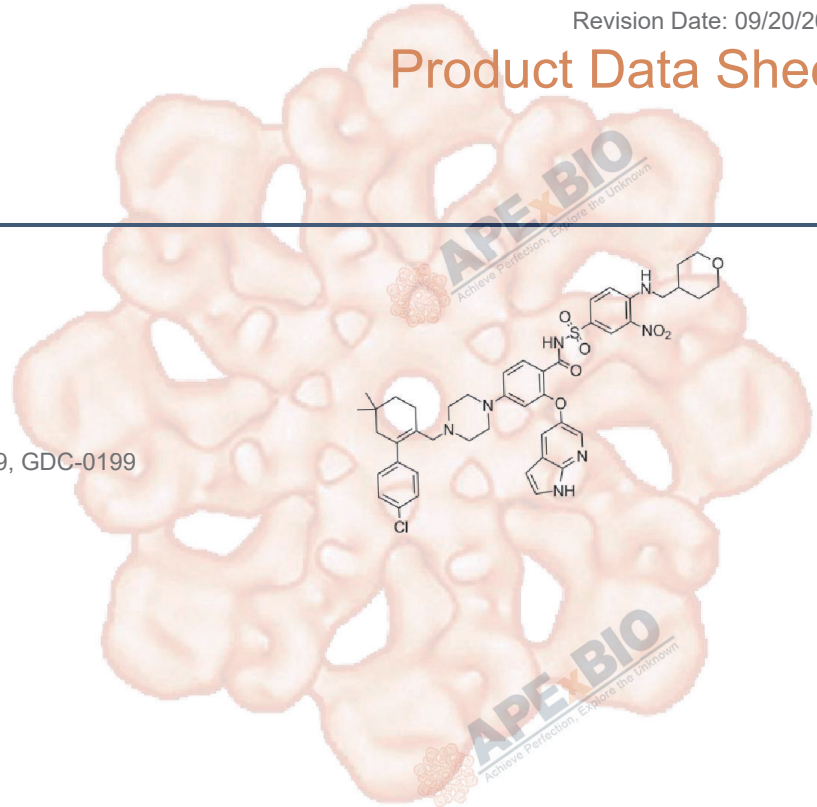


# Product Data Sheet

## ABT-199

<b>Cat. No.:</b>	A8194
<b>CAS No.:</b>	1257044-40-8
<b>Formula:</b>	C45H50ClN7O7S
<b>M.Wt:</b>	868.44
<b>Synonyms:</b>	ABT199, ABT 199, GDC0199, GDC-0199
<b>Target:</b>	Apoptosis
<b>Pathway:</b>	Bcl-2 Family
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

≥43.42 mg/mL in DMSO; insoluble in EtOH; insoluble in H2O

In Vitro	Preparing Stock Solutions	Mass			
		Solvent	1mg	5mg	10mg
		<b>Concentration</b>			
		<b>1 mM</b>	1.1515 mL	5.7575 mL	11.5149 mL
		<b>5 mM</b>	0.2303 mL	1.1515 mL	2.3030 mL
		<b>10 mM</b>	0.1151 mL	0.5757 mL	1.1515 mL

Please refer to the solubility information to select the appropriate solvent

## Biological Activity

Shortsummary	Bcl-2 inhibitor,potent and selective	
IC <sub>50</sub> & Target	< 0.010 nM (Ki) (Bcl-2)	
In Vitro	<b>Cell Viability Assay</b>	
	Cell Line:	normal human B cells, as well as CD4+and CD8+ T cells
	Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
	Reacting conditions:	24h ;4 μM

	Applications:	We first determined the in vitro sensitivity to ABT-199 of normal human B cells, as well as CD4+and CD8+ T cells in peripheral blood sampled from healthy donors (n=9). Significantly, normal peripheral B cells were intrinsically more sensitive (~1000-fold) to ABT-199 than either T-cell subset (mean ABT-199 LC50±s.e.m. for B cells, CD4 T cells and CD8 T cells were 3.0 ±0.9 nM , 2.5±0.6 µM and 1.3±0.7 µM , respectively; B versus CD4 T cells: P=0.008; and B versus CD8 T cells: P=0.004). The result shown that normal human peripheral blood B cells are highly sensitive to ABT-199, unlike T cells and myeloid cells.
In Vivo	<b>Animal experiment</b>	
	Animal models:	Eµ-Myc mice
	Dosage form:	100 mg/kg ; Oral taken
	Applications:	We examined the effect of short-term treatment with ABT-199 (used at 100 mg/kg) on the lymphoid subpopulations in vivo to assess this and to model probable changes during therapy of patients. ABT-199 was administered orally, Consistent with our in vitro observations with murine and human cells, the drug substantially reduced peripheral B cells to a similar extent. These data suggested that because of intrinsic insensitivity to selective Bcl-2 inhibition of key B- and T-precursor cells, longer-term administration of ABT-199 may have an impact on normal lymphopoiesis to a lesser degree.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

1. Thompson PJ, Shah A, et al. "Targeted Elimination of Senescent Beta Cells Prevents Type 1 Diabetes." Cell Metab. 2019 Feb 14. pii: S1550-4131(19)30021-X.PMID:30799288
2. Minagawa K, Al-Obaidi M, et al. "Generation of Suicide Gene-Modified Chimeric Antigen Receptor-Redirected T-Cells for Cancer Immunotherapy." Methods Mol Biol. 2019;1895:57-73.PMID:30539529
3. Wu S, Fatkhutdinov N, et al. "SWI/SNF catalytic subunits' switch drives resistance to EZH2 inhibitors in ARID1A-mutated cells." Nat Commun. 2018 Oct 8;9(1):4116.PMID:30297712
4. Li Q, Deng Q, et al. "Linking prostate cancer cell AR heterogeneity to distinct castration and enzalutamide responses." Nat Commun. 2018 Sep 6;9(1):3600.PMID:30190514
5. Kim SR, Lewis JM, et al. "BET inhibition in advanced cutaneous T cell lymphoma is synergistically potentiated by BCL2 inhibition or HDAC inhibition." Oncotarget. 2018 Jun 26;9(49):29193-29207.PMID:30018745

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

[1] Khaw S L, Mérino D, Anderson M A, et al. Both leukaemic and normal peripheral B lymphoid cells are highly sensitive to the selective pharmacological inhibition of pro-survival Bcl-2 with ABT-199[J]. Leukemia, 2014, 28(6): 1207-1215.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

**APEX BIO Technology**

**[www.apexbt.com](http://www.apexbt.com)**

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)

