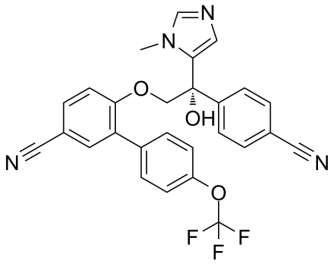
ABT-100

Cat. No.:	HY-119257
CAS No.:	450839-40-4
Molecular Formula:	$C_{27}H_{19}F_3N_4O_3$
Molecular Weight:	504.46
Target:	Farnesyl Transferase; Apoptosis
Pathway:	Metabolic Enzyme/Protease; Apoptosis
Storage:	-20°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (99.12 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9823 mL	9.9116 mL	19.8232 mL
	5 mM	0.3965 mL	1.9823 mL	3.9646 mL
	10 mM	0.1982 mL	0.9912 mL	1.9823 mL

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

BIOLOGICAL ACTIVITY

Description

ABT-100 is a potent, highly selective and orally active farnesyltransferase inhibitor. ABT-100 inhibits cell proliferation (IC_{50}s of 2.2 nM, 3.8 nM, 5.9 nM, 6.9 nM, 9.2 nM, 70 nM and 818 nM for EJ-1, DLD-1, MDA-MB-231, HCT-116, MiaPaCa-2, PC-3, and DU-145 cells, respectively), increases apoptosis and decreases angiogenesis. ABT-100 possesses broad-spectrum antitumor activity[1].

IC_{50} & Target

Farnesyltransferase[1]

In Vitro

ABT-100 (0.1-100 nM; 7 days; EJ-1, DLD-1, MDA-MB-231, HCT-116, MiaPaCa-2, PC-3, and DU-145 cells) treatment shows dose-dependent growth inhibition of human cancer cell lines. Also inhibits colony formation at concentrations comparable with which ABT-100 inhibits anchorage-dependent growth[1].

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

Cell Proliferation Assay[1]

Cell Line:	EJ-1, DLD-1, MDA-MB-231, HCT-116, MiaPaCa-2, PC-3, and DU-145 cells
Concentration:	0.1-100 nM

Incubation Time:	7 days
Result:	Demonstrated dose-dependent growth inhibition of human cancer cell lines.

In Vivo

ABT-100 (6.25-12.5 mg/kg/day; subcutaneous injection; daily; for 21 days; C.B-17 scid male mice) treatment regresses EJ-1 tumors in mice[1].

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

Animal Model:	C.B-17 scid male mice with EJ-1 cells[1]
Dosage:	6.25 mg/kg/day, 12.5 mg/kg/day
Administration:	Subcutaneous injection; daily; for 21 days
Result:	Regressed EJ-1 tumors in C.B-17 scid male mice.

REFERENCES

[1]. Ferguson D, et al. Antitumor activity of orally bioavailable farnesyltransferase inhibitor, ABT-100, is mediated by antiproliferative, proapoptotic, and antiangiogenic effects in xenograft models. Clin Cancer Res. 2005 Apr 15;11(8):3045-54.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA