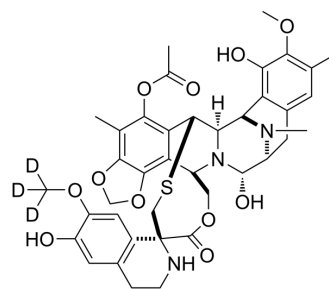


Trabectedin-d₃

Cat. No.:	HY-50936S
Molecular Formula:	C ₃₉ H ₄₀ D ₃ N ₃ O ₁₁ S
Molecular Weight:	764.86
Target:	Reactive Oxygen Species; Apoptosis; Isotope-Labeled Compounds
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Apoptosis; Others
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (43.58 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.3074 mL	6.5371 mL	13.0743 mL
	5 mM	0.2615 mL	1.3074 mL	2.6149 mL
	10 mM	0.1307 mL	0.6537 mL	1.3074 mL

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

BIOLOGICAL ACTIVITY

Description

Trabectedin D3 (Ecteinascidin 743 D3) is deuterium labeled Trabectedin. Trabectedin is a tetrahydroisoquinoline alkaloid with potent antitumor activity. Trabectedin binds to the minor groove of DNA, blocks transcription of stress-induced proteins, induces DNA backbone cleavage and cancer cells apoptosis, and increases the generation of ROS in MCF-7 and MDA-MB-453 cells. Trabectedin has the potential for soft tissue sarcoma and ovarian cancer treatment^{[1][2][3]}.

REFERENCES

- [1]. Takahashi N, et al. Sequence-dependent synergistic cytotoxicity of ecteinascidin-743 and NSC 125973 in human breast cancer cell lines in vitro and in vivo. *Cancer Res.* 2002 Dec 1;62(23):6909-15.
- [2]. Atmaca H, et al. A diverse induction of apoptosis by trabectedin in MCF-7 (HER2-/ER+) and MDA-MB-453 (HER2+/ER-) breast cancer cells. *Toxicol Lett.* 2013 Jun 20;221(2):128-136.
- [3]. Germano G, et al. Antitumor and anti-inflammatory effects of trabectedin on human myxoid liposarcoma cells. *Cancer Res.* 2010 Mar 15;70(6):2235-44.

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

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