Bizelesin

Cat. No.:	HY-111397	
CAS No.:	129655-21-6	
Molecular Formula:	C ₄₃ H ₃₆ Cl ₂ N ₈ O ₅	
Molecular Weight:	815.7	
Target:	DNA Alkylator/Crosslinker	NH O
Pathway:	Cell Cycle/DNA Damage	ОН
Storage:	4°C, protect from light, stored under nitrogen	
	* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under	
	nitrogen)	

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (122.59 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
		1 mM	1.2259 mL	6.1297 mL	12.2594 mL	
		5 mM	0.2452 mL	1.2259 mL	2.4519 mL	
		10 mM	0.1226 mL	0.6130 mL	1.2259 mL	
	Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent Solubility: ≥ 2.5 m	one by one: 10% DMSO >> 40% PEC g/mL (3.06 mM); Clear solution	6300 >> 5% Tween-86	0 >> 45% saline		

Description	Bizelesin (NSC 615291; U-77779) is an AT-specific DNA alkylating agent that can generate DNA interstrand crosslinks, effectively inhibit DNA replication, and has potential anticancer activity ^[1] .			
In Vitro	Bizelesin (0-5 μM, 4 h) can cause DNA-specific damage by targeting the AT-rich DNA domain in human cancer cell CEM cells, thereby causing damage to cancer cells, and has potential cancer therapeutic potential ^[1] . Bizelesin (0-500 nM) causes a 50% inhibition of DNA synthesis at a concentration of 10 nM, compared to a 50% inhibition of RNA synthesis at a concentration of 160 nM, at concentrations as high as 200 nM no inhibition of protein synthesis is observed in BSC-1 cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

REFERENCES

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[1]. J M Woynarowski, et al. AT-rich islands in genomic DNA as a novel target for AT-specific DNA-reactive antitumor drugs. J Biol Chem. 2001 Nov 2;276(44):40555-66.

[2]. J M Woynarowski, et al. Effects of bizelesin (U-77,779), a bifunctional alkylating minor groove binder, on replication of genomic and simian virus 40 DNA in BSC-1 cells. Biochim Biophys Acta. 1997 Jul 17;1353(1):50-60.

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

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