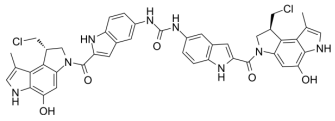
Bizelesin

Cat. No.:	HY-111397
CAS No.:	129655-21-6
Molecular Formula:	$C_{43}H_{36}Cl_2N_8O_5$
Molecular Weight:	815.7
Target:	DNA Alkylator/Crosslinker
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

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

[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.

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