PRODUCT INFORMATION



Incyclinide

Item No. 34597

CAS Registry No.:	15866-90-7	
Formal Name:	(4aS,5aR,12aS)-1,4,4a,5,5a,6,11,12a-	
	octahydro-3,10,12,12a-tetrahydroxy-	
	1,11-dioxo-2-naphthacenecarboxamide	
Synonyms:	CMT-3, COL-3, NSC 683551	
MF:	C ₁₉ H ₁₇ NO ₇	
FW:	371.3	
Purity:	≥98%	V V H V H V OH
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents	s the product specifications. Batch specific analytic	cal results are provided on each certificate of analysis.

Laboratory Procedures

Incyclinide is supplied as a solid. A stock solution may be made by dissolving the incyclinide in the solvent of choice, which should be purged with an inert gas. Incyclinide is soluble in DMSO.

Description

Incyclinide is a non-antimicrobial chemically modified tetracycline (CMT) and an inhibitor of matrix metalloproteinase-13 (MMP-13), MMP-1, and MMP-8 (IC₅₀s = 0.3, 34, and 48 μ g/ml, respectively).¹ It inhibits chick osteoclast digestion of isolated bovine bone when used at a concentration of 5 μ g/ml and inhibits IL-1-induced glycosaminoglycan release from porcine articular cartilage explants at 10 μg/ml. Incyclinide (10 μM) also induces cytotoxicity of HeLa and SiHa human cervical cancer cells, as well as induces apoptosis in HeLa cells and cell cycle arrest at the G_0/G_1 phase in SiHa cells.²

References

- 1. Greenwald, R.A., Golub, L.M., Ramamurthy, N.S., et al. In vitro sensitivity of the three mammalian collagenases to tetracycline inhibition: Relationship to bone and cartilage degradation. Bone 22(1), 33-38 (1998).
- 2. Zhao, L., Xu, J., Yang, Y., et al. Inhibitory impacts of chemically modified tetracycline-3 and underlying mechanism in human cervical cancer cells. Anticancer Drugs 24(8), 799-809 (2013).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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