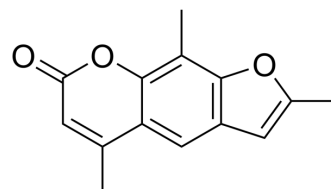


Trioxsalen

Cat. No.:	HY-B1157		
CAS No.:	3902-71-4		
Molecular Formula:	C ₁₄ H ₁₂ O ₃		
Molecular Weight:	228.24		
Target:	DNA Alkylator/Crosslinker		
Pathway:	Cell Cycle/DNA Damage		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 2 mg/mL (8.76 mM; Need ultrasonic)
 H₂O : 1 mg/mL (4.38 mM; ultrasonic and warming and heat to 80°C)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.3814 mL	21.9068 mL	43.8135 mL
	5 mM	0.8763 mL	4.3814 mL	8.7627 mL
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

Trioxsalen (Trisoralen), a psoralen derivative, is a photochemical DNA crosslinker. Trioxsalen only works after photoactivation with near ultraviolet light. Trioxsalen is a photosensitizer that can be used for the research of vitiligo and hand eczema. Trioxsalen is used for visualization of genomic interstrand cross-links localized by laser photoactivation^{[1][2][3]}.

In Vitro

Trioxsalen (200 nM) plus 365 nm light produce DNA crosslinks but not breaks in mouse L1210 leukemia cells^[4].
 Trioxsalen/UVA treatment of HaCaT keratinocytes induces NF-kappaB binding activity, and that this is a synergistic effect^[5].
 Trioxsalen shows anti-inflammatory capacities in vitro^[5].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Trioxsalen induces dose-dependent depletion of ATPase-positive LCs, with a maximal depletion of 80%, in oral mucous membrane (OMM) with PUVA (UVA doses of 1-8 J/cm²) in rat^[3].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Immunity. 2024 Jan 17:S1074-7613(24)00026-8.

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- [3]. A Kuusilehto, et al. The effect of PUVA on langerhans cells in rat oral epithelium photosensitized with systemic methoxsalen or topical trioxsalen. Photodermatol Photoimmunol Photomed. 2000 Jun;16(3):129-33.
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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