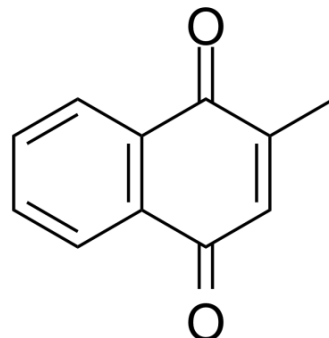


Menadione

Cat. No.:	HY-B0332
CAS No.:	58-27-5
Molecular Formula:	C ₁₁ H ₈ O ₂
Molecular Weight:	172.18
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°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 : 50 mg/mL (290.39 mM; Need ultrasonic)				
	H ₂ O : < 0.1 mg/mL (insoluble)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	5.8079 mL	29.0394 mL	58.0788 mL
	5 mM	1.1616 mL	5.8079 mL	11.6158 mL	
	10 mM	0.5808 mL	2.9039 mL	5.8079 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (12.08 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (12.08 mM); Clear solution 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (12.08 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Menadione, a synthetic naphthoquinone, can be converted to active vitamin K2 in vivo. Target: Others Menadione (Vitamin K3) is a synthetic analogue of 1,4-naphthoquinone with a methyl group in the 2-position. Menadione is used as a phosphatase inhibitor and an inhibitor of mitochondrial DNA polymerase γ (pol γ). Menadione can be used as an oxidative injury (free radical generator) inducing agent [1].
IC₅₀ & Target	Human Endogenous Metabolite

CUSTOMER VALIDATION

- Autophagy. 2019 Dec 18:1-14.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. <http://en.wikipedia.org/wiki/Menadione>

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

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