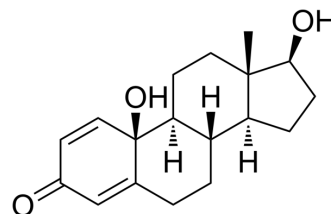


10 β ,17 β -dihydroxyestra-1,4-dien-3-one

Cat. No.:	HY-128976		
CAS No.:	549-02-0		
Molecular Formula:	C ₁₈ H ₂₄ O ₃		
Molecular Weight:	288.38		
Target:	Estrogen Receptor/ERR		
Pathway:	Vitamin D Related/Nuclear Receptor		
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 : 100 mg/mL (346.76 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	3.4676 mL	17.3382 mL	34.6765 mL
	5 mM	0.6935 mL	3.4676 mL	6.9353 mL
	10 mM	0.3468 mL	1.7338 mL	3.4676 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (7.21 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (7.21 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (7.21 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	10 β ,17 β -dihydroxyestra-1,4-dien-3-one (DHED) is a brain-targeting bioprecursor proagent of the main human estrogen, 17 β -estradiol, alleviates hot flushes in rat models of thermoregulatory dysfunction of the brain ^[1] .
In Vivo	10 β ,17 β -dihydroxyestra-1,4-dien-3-one (DHED), is an inactive bioprecursor prodrug of 17 β -estradiol converting to 17 β -estradiol only in the brain. DHED as an E2-bioprecursor may be a viable approach for delivering E2 selectively into the brain for the potential treatment of hot flushes ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Merchenthaler I, et al. Treatment with an orally bioavailable prodrug of 17 β -estradiol alleviates hot flushes without hormonal effects in the periphery. Sci Rep. 2016 Aug 1;6:30721.

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

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