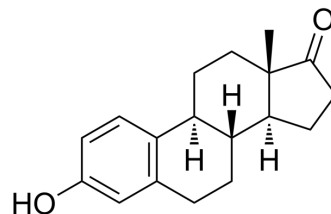


## Estrone

<b>Cat. No.:</b>	HY-B0234		
<b>CAS No.:</b>	53-16-7		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>22</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	270.37		
<b>Target:</b>	Estrogen Receptor/ERR; Endogenous Metabolite		
<b>Pathway:</b>	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 25 mg/mL (92.47 mM; ultrasonic and warming and heat to 60°C)			
	H <sub>2</sub> O : 0.1 mg/mL (0.37 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
<b>Preparing Stock Solutions</b>	1 mM	3.6986 mL	18.4932 mL	36.9864 mL
	5 mM	0.7397 mL	3.6986 mL	7.3973 mL
	10 mM	0.3699 mL	1.8493 mL	3.6986 mL
	Please refer to the solubility information to select the appropriate solvent.			
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (9.25 mM); Suspended solution; Need ultrasonic			
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.25 mM); Clear solution			

### BIOLOGICAL ACTIVITY

<b>Description</b>	Estrone (E1) is a natural estrogenic hormone. Estrone is the main representative of the endogenous estrogens and is produced by several tissues, especially adipose tissue. Estrone is the result of the process of aromatization of androstenedione that occurs in fat cells <sup>[1][2]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite	Human Endogenous Metabolite
<b>In Vitro</b>	Estrone is the main endogenous estrogen in postmenopausal women <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

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## CUSTOMER VALIDATION

- Biosens Bioelectron. 12 July 2022, 114548.
- J Cell Mol Med. 2020 Dec;24(23):13775-13788.
- Int Immunopharmacol. 2020 Jan;78:105937.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Caupos E, et al. Photodegradation of estrone enhanced by dissolved organic matter under simulated sunlight. Water Res. 2011;45(11):3341-3350.

[2]. de Padua Mansur A, et al. Long-term prospective study of the influence of estrone levels on events in postmenopausal women with or at high risk for coronary artery disease. ScientificWorldJournal. 2012;2012:363595.

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

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