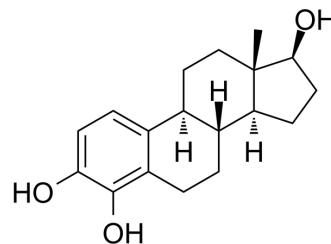


4-Hydroxyestradiol

Cat. No.:	HY-N10403		
CAS No.:	5976-61-4		
Molecular Formula:	C ₁₈ H ₂₄ O ₃		
Molecular Weight:	288.38		
Target:	Drug Metabolite; Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (86.69 mM; Need ultrasonic and warming)

Concentration	Solvent	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.

BIOLOGICAL ACTIVITY

Description

4-Hydroxyestradiol (4-Hydroxy-17β-estradiol) is an endogenous metabolite of Estradiol (HY-B0141). 4-Hydroxyestradiol is carcinogenic and shows mutagenic activity in breast epithelial cells. 4-Hydroxyestradiol inhibits the binding of Estradiol to the estrogen receptor in a competitive manner, with a K_i of 0.48 nM^{[1][2]}.

REFERENCES

[1]. Fernandez SV, et al. Estradiol and its metabolites 4-hydroxyestradiol and 2-hydroxyestradiol induce mutations in human breast epithelial cells. *Int J Cancer*. 2006 Apr 15;118(8):1862-8. doi: 10.1002/ijc.21590.

[2]. Van Aswegen CH, et al. Binding of 2-hydroxyestradiol and 4-hydroxyestradiol to estrogen receptors from human breast cancers. *J Steroid Biochem*. 1989 Apr;32(4):485-92.

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