Proteins

Estradiol valerate

Cat. No.: HY-B0672 CAS No.: 979-32-8 Molecular Formula: C₂₃H₃₂O₃ Molecular Weight: 356.5

Target: Estrogen Receptor/ERR

Pathway: Vitamin D Related/Nuclear Receptor

Storage: Powder

> 4°C 2 years

3 years

-80°C In solvent 2 years

-20°C

-20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

DMSO: ≥ 50 mg/mL (140.25 mM) In Vitro

 $H_2O: < 0.1 \text{ mg/mL}$ (insoluble)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8050 mL	14.0252 mL	28.0505 mL
	5 mM	0.5610 mL	2.8050 mL	5.6101 mL
	10 mM	0.2805 mL	1.4025 mL	2.8050 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: ≥ 2.67 mg/mL (7.49 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.67 mg/mL (7.49 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.67 mg/mL (7.49 mM); Clear solution

BIOLOGICAL ACTIVITY

Description Estradiol valerate (β-Estradiol 17-valerate) is a synthetic estrogen widely used in combination with other steroid hormones in hormone replacement therapy agents.

IC₅₀ & Target Estrogen Receptor/ERR

In Vitro

Estradiol valerate (EV) is a synthetic estrogen widely used in combination with other steroid hormones in hormone replacement therapy drugs and is detected in natural waters. Estradiol valerate is a reproductive toxicant and estrogenic chemical in both male and female fish^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lei, B., et al., beta-estradiol 17-valerate affects embryonic development and sexual differentiation in Japanese medaka (Oryzias latipes). Aquat Toxicol, 2013. 134-135: p. 128-34.

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