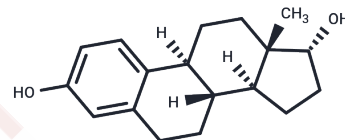


Alpha-Estradiol

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 57-91-0 |
| Formula: | C ₁₈ H ₂₄ O ₂ |
| Molecular Weight: | 272.38 |
| Appearance: | no data available |
| Storage: | keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year |



Biological Description

| | |
|---------------|---|
| Description | Alpha-Estradiol (Epiestradiol) is an estrogen that inhibits 5alpha-reductase and has potential in the study of androgenetic alopecia. |
| Targets(IC50) | Estrogen/progestogen Receptor,Reductase,Endogenous Metabolite |
| Kinase Assay | Na ⁺ -Ca ²⁺ exchange activity is determined by assaying Na ⁺ -dependent 45Ca ²⁺ uptake as reported previously. Briefly, the cells are preincubated in Hanks' balanced saline solution (HBSS) for 20 min, and the medium is switched to HBSS containing 45Ca ²⁺ and incubated for 5 min. To increase intracellular Na ⁺ concentration, 1 mM ouabain plus 20 μM monensin (for astrocytes and microglia) and 10 μM monensin (for neurons) are used. Monensin is added simultaneously with the isotope. Ouabain is added 5 min before monensin in astrocytes and microglia. SEA0400 and KB-R7943 are added 5 min before monensin and present during 45Ca ²⁺ uptake reaction. |

Solubility Information

| | |
|------------|---|
| Solubility | 10% Corn oil+90% Salin: 4 mg/mL (14.69 mM),Sonication is recommended. 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 4 mg/mL (14.69 mM),Sonication is recommended. DMSO: 45 mg/mL (165.21 mM),Sonication is recommended. Ethanol: 10 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.6713 mL | 18.3567 mL | 36.7134 mL |
| 5 mM | 0.7343 mL | 3.6713 mL | 7.3427 mL |
| 10 mM | 0.3671 mL | 1.8357 mL | 3.6713 mL |
| 50 mM | 0.0734 mL | 0.3671 mL | 0.7343 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Santos RS, et al. The effects of 17 alpha-estradiol to inhibit inflammation in vitro. Biol Sex Differ. 2017 Sep 6;8:30.
Schriefers H, et al. Inhibition of testosterone metabolism by 17-alpha-estradiol in rat liver slices. Arzneimittelforschung. 1991 Nov;41(11):1186-9.
Zhang HB, et al. 17-Alpha-estradiol ameliorating oxygen-induced retinopathy in a murine model. Jpn J Ophthalmol. 2012 Jul;56(4):407-15.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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