Data Sheet (Cat.No.T13518)

TargetMol

5α-Pregnane-3β,6α-diol-20-one

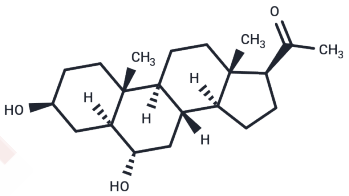
Chemical Properties

CAS No. : 21853-11-2

Formula: C21H34O3

Molecular Weight: 334.49

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	5α-Pregnane-3β,6α-diol-20-one is a mitogenic metabolite derived from progesterone, synthesized by androgen-responsive prostate cancer cells under starvation conditions.
Targets(IC50)	Others,Drug Metabolite
In vitro	Progesterone is converted to 5α-pregnane-3β,6α-diol-20-one in human fibroblasts [1]. Pregnenolone and progesterone are avidly metabolized to 5α-pregnan-3β,6α-diol-20-one in the C4.2 cell line, with nearly complete conversions at 24 h and 18 h, respectively. Preferential 5α-pregnan-3β,6α-diol-20-one formation from early steroid precursors is independent of CYP17A1 but rather dependent on 3β-HSD activity [2].

Solubility Information

Solubility	DMSO: 100 mg/mL (298.96 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (11.96 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9896 mL	14.9481 mL	29.8963 mL
5 mM	0.5979 mL	2.9896 mL	5.9793 mL
10 mM	0.299 mL	1.4948 mL	2.9896 mL
50 mM	0.0598 mL	0.299 mL	0.5979 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhang J, et al. Progesterone metabolism in human fibroblasts is independent of P-glycoprotein levels and Niemann-Pick type C disease. J Steroid Biochem Mol Biol. 1999 Sep-Oct;70(4-6):123-31.
de Mello Martins AGG, et al. CYP17A1-independent production of the neurosteroid-derived 5α-pregnan-3β,6α-diol-20-one in androgen-responsive prostate cancer cell lines under serum starvation and inhibition by Abiraterone. J Steroid Biochem Mol Biol. 2017 Nov;174:183-191.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481