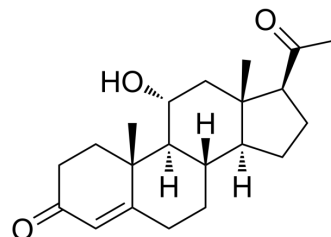


11alpha-Hydroxyprogesterone

| | | | |
|---------------------------|--|-------|----------|
| Cat. No.: | HY-W011243 | | |
| CAS No.: | 80-75-1 | | |
| Molecular Formula: | C ₂₁ H ₃₀ O ₃ | | |
| Molecular Weight: | 330.46 | | |
| Target: | Others | | |
| Pathway: | Others | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (302.61 mM; Need ultrasonic)

| Concentration | Solvent | Mass | 1 mg | 5 mg | 10 mg |
|---------------------------|---------|------|-----------|------------|------------|
| | | | 1 mg | 5 mg | 10 mg |
| Preparing Stock Solutions | 1 mM | | 3.0261 mL | 15.1304 mL | 30.2609 mL |
| | 5 mM | | 0.6052 mL | 3.0261 mL | 6.0522 mL |
| | 10 mM | | 0.3026 mL | 1.5130 mL | 3.0261 mL |

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (7.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (7.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (7.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

11alpha-Hydroxyprogesterone is the analogue of 11beta-Hydroxyprogesterone (HY-N2337), and can be used as an experimental control. 11beta-Hydroxyprogesterone is a potent inhibitors of 11β-Hydroxysteroid dehydrogenase; also activates human mineralocorticoid receptor in COS-7 cells with an ED₅₀ of 10 nM.

REFERENCES

[1]. Rafestin-Oblin ME, et al. 11beta-hydroxyprogesterone acts as a mineralocorticoid agonist in stimulating Na⁺ absorption in mammalian principal cortical collecting duct cells. *Mol Pharmacol.* 2002 Dec;62(6):1306-13.

[2]. Souness GW, et al. 11 alpha- and 11 beta-hydroxyprogesterone, potent inhibitors of 11 beta-hydroxysteroid dehydrogenase, possess hypertensinogenic activity in the rat. *Hypertension.* 1996 Mar;27(3 Pt 1):421-5.

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

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