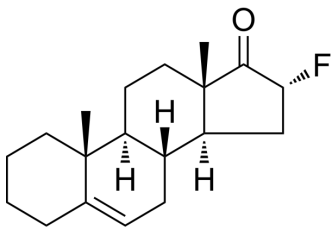
Fluasterone

Cat. No.:	HY-106328
CAS No.:	112859-71-9
Molecular Formula:	$C_{19}H_{27}FO$
Molecular Weight:	290.42
Target:	Others
Pathway:	Others
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (34.43 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.4433 mL	17.2164 mL	34.4329 mL
	5 mM	0.6887 mL	3.4433 mL	6.8866 mL
	10 mM	0.3443 mL	1.7216 mL	3.4433 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1 mg/mL (3.44 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fluasterone is a potent G6PD inhibitor with a K_i of 0.51 μM. Fluasterone has anti-inflammatory, cancer preventive, and anti-diabetic effects. Fluasterone is orally active[1][2][3].

IC_{50} & Target

Ki: 0.51 μM (G6PD)[3]

In Vivo

Fluasterone (0.2% and 0.3%; in diet for 39 days) shows anti-hyperglycemic effect in diabetic mice[2].

Fluasterone (200 μg/mouse; intradermal injection; once) suppresses the TPA-induced acute inflammatory and epidermal hyperplastic effect[3].

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

Animal Model:	Male C57BL/KsJ db/db mice, diabetic model[2]

Dosage:	0.2% and 0.3%
Administration:	In the diet for 39 days
Result:	Markedly reduced plasma glucose levels.

REFERENCES

[1]. Schwartz AG, et al. Potential therapeutic use of dehydroepiandrosterone and structural analogs. Diabetes Technol Ther. 2001 Summer;3(2):221-4.

[2]. Pashko LL, et al. Antihyperglycemic effect of dehydroepiandrosterone analogue 16 alpha-fluoro-5-androsten-17-one in diabetic mice. Diabetes. 1993 Aug;42(8):1105-8.

[3]. Schwartz AG, et al. Suppression of 12-O-tetradecanoylphorbol-13-acetate-induced epidermal hyperplasia and inflammation by the dehydroepiandrosterone analog 16alpha-fluoro-5-androsten-17-one and its reversal by NADPH liposomes. Cancer Lett. 2001 Jul 10;168(1):7-14.

[4]. Schwartz AG, et al. Suppression of 12-O-tetradecanoylphorbol-13-acetate-induced epidermal hyperplasia and inflammation by the dehydroepiandrosterone analog 16alpha-fluoro-5-androsten-17-one and its reversal by NADPH liposomes. Cancer Lett. 2001 Jul 10;168(1):7-14.

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