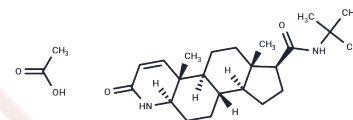


Finasteride acetate

Chemical Properties

CAS No. : 222989-99-3
 Formula: C₂₅H₄₀N₂O₄
 Molecular Weight: 432.605
 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	Finasteride (MK-906) acetate is a potent and competitive 5 α -reductase inhibitor with an IC ₅₀ of 4.2 nM for type II 5 α -reductase, demonstrating approximately 100-fold higher affinity for type II than type I. Finasteride acetate can be used for research on benign prostatic hyperplasia (BPH) and androgenic alopecia [1] [2] [3].
Targets(IC50)	Others,Reductase
In vitro	Finasteride, at a concentration of 10 μ M over incubation periods of 6 to 24 hours, induces the expression of HO-1 and Nrf2 proteins in PC-3 cells, and also inhibits the conversion of [3 H]testosterone (T) to [3 H]dihydrotestosterone (DHT) in P. crustosum. In cell viability assays involving PC-3, DU-145, and LNCaP cell lines treated with finasteride at 10 μ M for durations of 6, 12, and 24 hours, there was a noticeable increase in HO-1 protein expression in a time-dependent manner specifically in PC-3 cells. Additionally, finasteride triggered the expression of Nrf2 protein in DU-145 and PC-3 cells, though not in LNCaP cells.
In vivo	Finasteride, administered orally at a dosage of 0.1-0.5 mg/kg once daily for 16 weeks, effectively reduces prostatic size in male dogs aged 2.7-11 years and weighing 10.3-49 kg with spontaneous benign prostatic hyperplasia (BPH), as indicated by a decrease in prostatic diameter (20%), volume (43%), and serum dihydrotestosterone (DHT) concentration (58%). This treatment does not negatively impact semen quality or serum testosterone levels and is free from adverse effects on the animals [3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3116 mL	11.5578 mL	23.1155 mL
5 mM	0.4623 mL	2.3116 mL	4.6231 mL
10 mM	0.2312 mL	1.1558 mL	2.3116 mL
50 mM	0.0462 mL	0.2312 mL	0.4623 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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