

Abiraterone (acetate)

Catalog No: tcsc0544



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Size: 2g

Size: 5g



Specifications

CAS No:

154229-18-2

Formula:

$C_{26}H_{33}NO_2$

Pathway:

Metabolic Enzyme/Protease

Target:

Cytochrome P450

Purity / Grade:

>98%

Solubility:

DMSO : 13.3 mg/mL (33.97 mM; Need ultrasonic and warming)

Alternative Names:

CB7630

Observed Molecular Weight:

391.55

Product Description

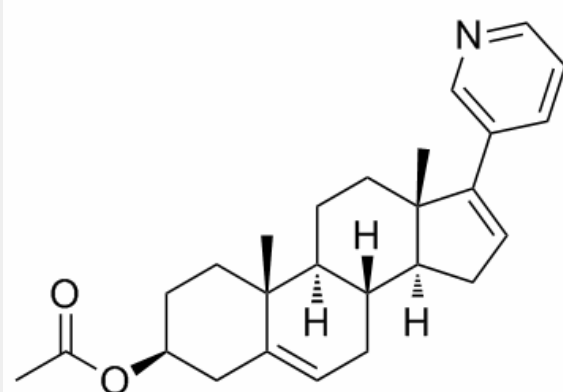
Abiraterone acetate is an oral, potent, selective, and irreversible inhibitor of **CYP17**.

IC₅₀ & Target: CYP17^[1]

In Vitro: Abiraterone (Abi) acetate is an ester prodrug of the anticancer agent Abiraterone, which shows IC₅₀ values of 15 nM and 2.5 nM for the 17,20-lyase and 17 α -hydroxylase (CYP17 is a bifunctional enzyme with both 17 α -hydroxylase and 17,20-lyase activity). Abiraterone inhibits human 17,20-lyase and 17 α -hydroxylase with IC₅₀ of 27 and 30 nM respectively^[1].

Significant inhibition of proliferation of the AR-positive prostate cancer cell lines LNCaP and VCaP with doses of Abiraterone ≥ 5 μ M is confirmed^[2]. Abiraterone inhibits recombinant human 3 β HSD1 and 3 β HSD2 activity with competitive K_i values of 2.1 and 8.8 μ M. 10 μ M Abiraterone is sufficient to completely block synthesis of 5 α -dione and DHT in both cell lines. Treatment with Abiraterone significantly inhibited CRPC progression in the robustly growing subset, effectively putting a ceiling on tumor growth over 4 weeks of treatment (P[3]).

In Vivo: Abiraterone (Abi) acetate prolongs survival in castration-resistant prostate cancer (CRPC). [³H]-dehydroepiandrosterone (DHEA) depletion and Δ^4 -androstenedione (AD) accumulation are inhibited by Abiraterone in LNCaP, with an IC₅₀^[3].



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