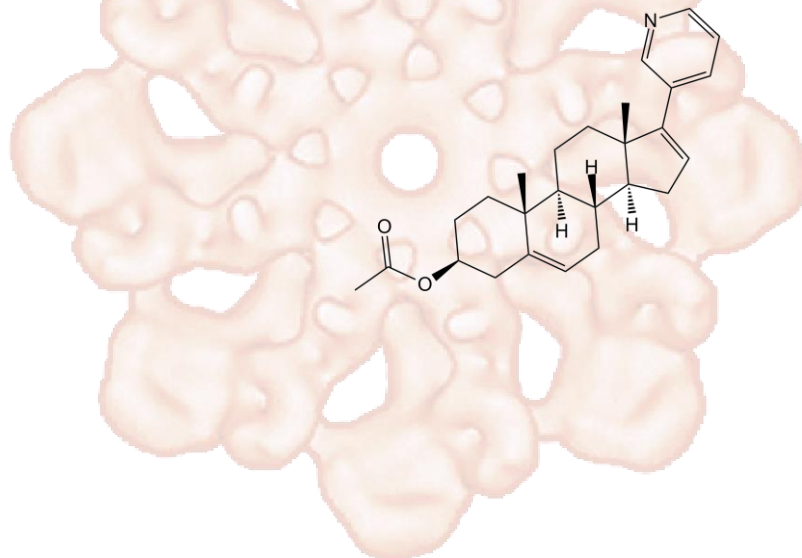


Abiraterone acetate

Cat. No.:	A8202
CAS No.:	154229-18-2
Formula:	C ₂₆ H ₃₃ NO ₂
M.Wt:	391.55
Synonyms:	
Target:	Metabolism
Pathway:	P450
Storage:	Store at -20°C



Solvent & Solubility

≥15.7mg/mL in Ethanol, ≥11.22 mg/mL in DMSO with ultrasonic and warming, insoluble in H₂O

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
	1 mM		2.5540 mL	12.7698 mL	25.5395 mL
	5 mM		0.5108 mL	2.5540 mL	5.1079 mL
	10 mM		0.2554 mL	1.2770 mL	2.5540 mL

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

Biological Activity

Shortsummary

Cytochrome p450 17a1 inhibitor

IC₅₀ & Target

72 nM (CYP17)

In Vitro

Cell Viability Assay

Cell Line: PC-3 cells

Preparation method: The solubility of this compound in DMSO is limited. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.

Reacting conditions: 0.1 ~ 25 μM; 16 hrs

Applications: In PC-3 cells co-transfected with ARE3-luciferase and wild type or mutant

androgen receptor (AR), Abiraterone Acetate at the dose up to 25 μ M did not any obvious increase in luciferase activity. However, Abiraterone Acetate dose-dependently inhibited stimulated wild type and mutant AR activity, with significant inhibition observed at the doses \leq 10 μ M.

Animal experiment

Animal models: Male NOD/SCID mice bearing LAPC4 cells

Dosage form: 0.5 mmol/kg/d; i.p.; 5 days per week, for 4 weeks

Applications: Abiraterone Acetate at the dose of 0.5 mmol/kg/d resulted in serum concentrations ranging from 0.5 to 1 mmol/L. Compared with the control group, Abiraterone Acetate treatment significantly inhibited "castration-resistant" prostate cancer progression in the robustly growing subset, effectively inhibiting tumor growth over 4 weeks of treatment.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

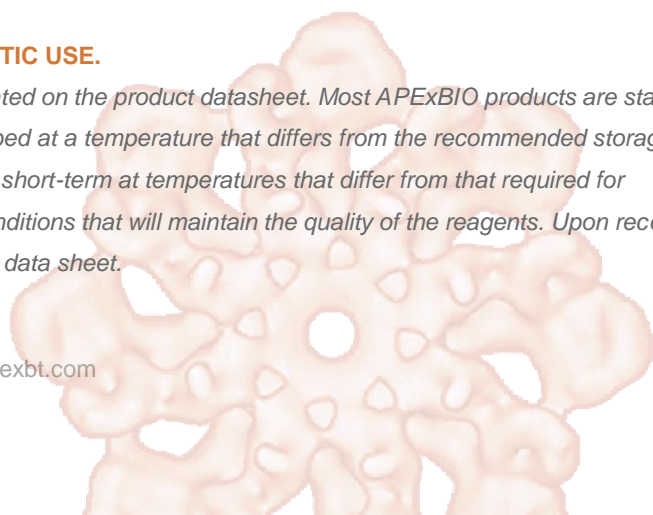
- [1]. Richards J, Lim AC, Hay CW, Taylor AE, Wingate A, Nowakowska K, Pezaro C, Carreira S, Goodall J, Arlt W, McEwan IJ, de Bono JS, Attard G. Interactions of abiraterone, eplerenone, and prednisolone with wild-type and mutant androgen receptor: a rationale for increasing abiraterone exposure or combining with MDV3100. *Cancer Res.* 2012 May 1;72(9):2176-82.
- [2]. Li R, Evaul K, Sharma KK, Chang KH, Yoshimoto J, Liu J, Auchus RJ, Sharifi N. Abiraterone inhibits 3 β -hydroxysteroid dehydrogenase: a rationale for increasing drug exposure in castration-resistant prostate cancer. *Clin Cancer Res.* 2012 Jul 1;18(13):3571-9.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEXBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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