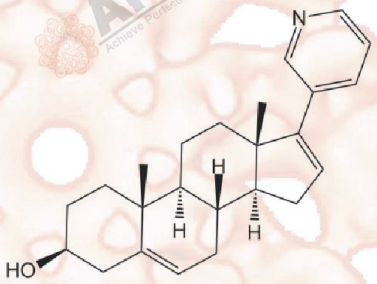
Product Data Sheet

Abiraterone



Cat. No.:	A4240
CAS No.:	154229-19-3
Formula:	C24H31NO
M.Wt:	349.52
Synonyms:	CB 7598,16-dien-3-ol,CB7598
Target:	Metabolism
Pathway:	P450
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in EtOH; insoluble in H2O; ⩾5.57 mg/mL in DMSO with gentle warming

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.8611 mL	14.3053 mL	28.6107 mL
5 mM	0.5722 mL	2.8611 mL	5.7221 mL
10 mM	0.2861 mL	1.4305 mL	2.8611 mL

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

Biological Activity

Shortsummary	Potent CYP17 inhibitor
IC_{50} & Target	2 nM (CYP17)

In Vitro

Cell Viability Assay

Cell Line:	LNCaP and VCaP cells
Preparation method:	Limited solubility. 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:	24 h-96 h

	Applications:	Abiraterone is an inhibitor of CYP17A1 for the treatment of docetaxel-treated castration-resistant prostate cancer. Abiraterone inhibits in vitro proliferation and AR-regulated gene expression of AR-positive prostate cancer cells.
In Vivo	**Animal experiment**	
	Animal models:	Adult male Wistar rats weighing 220–240 g
	Dosage form:	Administered by oral route at 10 ml/kg once daily for 3 days.
	Applications:	After 3 days of oral treatment at 50 mg/kg per day, abiraterone acetate markedly inhibits VP (-14%) and SV weights (-37%) without affecting adrenal weight (-7%). It also significantly inhibited T secretion (-48%) and in turn increased LH concentration (192%).
	Preparation method:	Distilled water with a few drops of Tween 80
	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.

Product Citations

1. Bogner J, Zolghadr K, et al. "The fluorescent two-hybrid assay for live-cell profiling of androgen receptor modulators." JSteroid Biochem Mol Biol. 2016 May 9.PMID:27174722

See more customer validations on www.apexbt.com.

References

1. Duc I, Bonnet P, Duranti V et al. In vitro and in vivo models for the evaluation of potent inhibitors of male rat 17alpha-hydroxylase/C17,20-lyase. J Steroid Biochem Mol Biol. 2003 Apr;84(5):537-42.

2. Richards J, Lim AC, Hay CW et al. 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. doi: 10.1158/0008-5472.CAN-11-3980.

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. Shortterm 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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