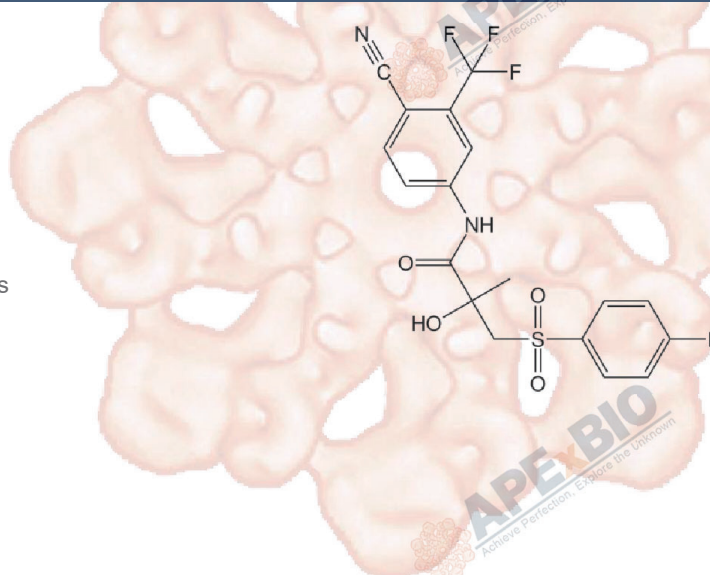


Product Data Sheet

Bicalutamide

Cat. No.:	A5065
CAS No.:	90357-06-5
Formula:	C ₁₈ H ₁₄ F ₄ N ₂ O ₄ S
M.Wt:	430.37
Synonyms:	
Target:	Endocrinology and Hormones
Pathway:	Androgen Receptor
Storage:	Store at -20°C



Solvent & Solubility

≥42.89 mg/mL in DMSO; insoluble in H₂O; ≥4.3 mg/mL in EtOH with ultrasonic

In Vitro	Preparing Stock Solutions	Mass			
		Solvent	1mg	5mg	10mg
		Concentration			
		1 mM	2.3236 mL	11.6179 mL	23.2358 mL
		5 mM	0.4647 mL	2.3236 mL	4.6472 mL
		10 mM	0.2324 mL	1.1618 mL	2.3236 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary	Androgen receptor antagonist	
IC ₅₀ & Target		
In Vitro	Cell Viability Assay	
	Cell Line:	VCaP or Hep-G2 cell lines
	Preparation method:	The solubility of this compound in DMSO is >21.5 mg/ml. 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:	10 ⁻¹¹ -10 ⁻⁴ M

	Applications:	Bicalutamide was found to be able to inhibit the growth in prostate cancer cells (VCaP cells) with overexpressed androgen receptor through directly binding to AR then mediating androgen-mediated gene transcription. Moreover, bicalutamide could impair the DNA binding and nuclear localization in prostate cancer cells. In HepG2 cells, bicalutamide could also significantly inhibit R1881-induced VP16-AR-mediated transcription with an IC50 value of 0.2 μ M.
In Vivo	Animal experiment	
	Animal models:	Male immunodeficient mice harboring LNCaP/AR-luc xenograft tumors
	Dosage form:	10 mg/kg/day, oral
	Applications:	In a clinically valid murine xenograft model of human CRPC, bicalutamide showed greater efficacy than MDV3100. Maximal therapeutic response in this model was achieved at 30 mg/kg/d of bicalutamide, whereas the same response required 100 mg/kg/d of MDV3100 and higher steady-state plasma concentrations.
	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] Clegg NJ, Wongvipat J, Joseph JD, Tran C, Ouk S, Dilhas A, Chen Y, Grillot K, Bischoff ED, Cai L et al: ARN-509: a novel antiandrogen for prostate cancer treatment. *Cancer Res* 2012, 72(6):1494-1503.

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 APEX BIO 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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