Bicalutamide

Cat. No.:	HY-14249			
CAS No.:	90357-06-5			
Molecular Formula:	$C_{18}H_{14}F_{4}N_{2}O_{4}S$			
Molecular Weight:	430.37			
Target:	Autophagy; Androgen Receptor			
Pathway:	Autophagy; Vitamin D Related/Nuclear Receptor			
Storage:	Powder	-20°C	3 years	
		4°C	2 years	
	In solvent	-80°C	1 year	
		-20°C	6 months	

SOLVENT & SOLUBILITY

In Vitro	DMSO : ≥ 50 mg/mL (116.18 mM) * "≥" means soluble, but saturation unknown.						
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		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.						
In Vivo	 Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.81 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.81 mM); Clear solution 						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.81 mM); Clear solution						

Bicalutamide is an orally active non-steroidal androgen receptor (AR) antagonist. Bicalutamide can be used for the research

Product Data Sheet

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Bicalutamide competes with androgens for binding AR in in a whole-cell binding-assay (LNCaP/AR(cs) cells), with an IC₅₀ of

In Vitro

BIOLOGICAL ACTIVITY

of prostate cancer^[1].

Androgen receptor^[1]

Description

IC₅₀ & Target



	160 nM ^[1] . Bicalutamide induces proliferation of VCaP cells in a dose-dependent manner, whereas partially antagonizes the effects of R1881 (synthetic androgen) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			
In Vivo	.; daily; for 28 days) exhibits anti-tumor activity in prostate cancer mice model ^[1] . confirmed the accuracy of these methods. They are for reference only.			
	Animal Model:	Castrate male mice, bearing LNCaP/AR(cs) xenograft tumors ^[1]		
	Dosage:	10 mg/kg		
	Administration:	Oral gavage, daily, for 28 days		
	Result:	Inhibited tumors growth.		

CUSTOMER VALIDATION

- Nucleic Acids Res. 2022 Aug 31;gkac737.
- Biomaterials. 16 September 2022.
- Cell Death Dis. 2021 Jul 27;12(8):740.
- J Drug Deliv Sci Technol. 2021, 102340.
- Sci Rep. 2017 Jun 8;7(1):3058.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Nicola J. Clegg, 1 John Wongvipat, 1,2 Jim Joseph, ARN-509: a novel anti-androgen for prostate cancer treatment. Cancer Res. 2012 March 15; 72(6): 1494-1503.

Caution: Product has not been fully validated for medical applications. For research use only.

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