(R)-(+)-Aminoglutethimide

Cat. No.:	HY-W392925			
CAS No.:	55511-44-9			
Molecular Formula:	$C_{13}H_{16}N_2O_2$			
Molecular Weight:	232.28			
Target:	Cytochrome P450			
Pathway:	Metabolic Enzyme/Protease			
Storage:	Powder	-20°C	3 years	
		4°C	2 years	
	In solvent	-80°C	6 months	
		-20°C	1 month	

SOLVENT & SOLUBILITY

DMSO : 100 mg/mL (430.51 mM; Need ultrasonic) H ₂ O : 4.81 mg/mL (20.71 mM; ultrasonic and warming and adjust pH to 3 with HCl and heat to 60°C)					
	Solvent Mass Concentration	1 mg	5 mg	10 mg	
Preparing Stock Solutions	1 mM	4.3051 mL	21.5257 mL	43.0515 mL	
	5 mM	0.8610 mL	4.3051 mL	8.6103 mL	
	10 mM	0.4305 mL	2.1526 mL	4.3051 mL	
Please refer to the solubility information to select the appropriate solvent.					
1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution					
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution					
3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution					
	DMSO : 100 mg/mL (4: H ₂ O : 4.81 mg/mL (20. Preparing Stock Solutions Please refer to the sol 1. Add each solvent of Solubility: ≥ 2.5 mg 2. Add each solvent of Solubility: ≥ 2.5 mg 3. Add each solvent of Solubility: ≥ 2.5 mg	DMSO: 100 mg/mL (430.51 mM; Need ultrasonic) H ₂ O: 4.81 mg/mL (20.71 mM; ultrasonic and warming and Solvent Mass Solvent Concentration Preparing 1 mM Stock Solutions 5 mM 10 mM 10 mM Please refer to the solubility information to select the approximation to select the approximation to select the approximation to select the approximation to solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20 Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution 3. Add each solvent one by one: 10% DMSO >> 90% cor Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution	DMSO : 100 mg/mL (430.51 mM; Need ultrasonic) H ₂ O : 4.81 mg/mL (20.71 mM; ultrasonic and warming and adjust pH to 3 with H Solvent Mass 1 mg Concentration 4.3051 mL Stock Solutions 5 mM 0.8610 mL 10 mM 0.4305 mL Please refer to the solubility information to select the appropriate solvent. 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-8t Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution	DMSO : 100 mg/mL (430.51 mM; Need ultrasonic) H ₂ O : 4.81 mg/mL (20.71 mM; ultrasonic and warming and adjust pH to 3 with HCl and heat to 60°C) Preparing Stock Solutions 1 mg 5 mg 1 mM 4.3051 mL 21.5257 mL 21.5257 mL 10 mM 0.8610 mL 4.3051 mL 2.1526 mL Please refer to the solubility information to select the appropriate solvent. 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.76 mM); Clear solution	

Description	(R)-(+)-Aminoglutethimide is a potent and orally active aromatase inhibitor. (R)-(+)-Aminoglutethimide has the potential for the research of breast cancer ^[1] .			
IC ₅₀ & Target	Aromatase			
In Vivo	(R)-(+)-Aminoglutethimide (5, 50 mg/kg; p.o.) eliminates within 48 hr into urine and feces, mostly in the form of metabolites			

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(R)-(+)-Aminoglutethimide (1, 10, 50 mg/kg; i.p.; 60 min before training) dose not induce any significant effect in 1 and 10 mg/kg, induces a loss of retention at 50 mg/kg in day-old chicks^[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Dai Sig Im, et al. Chemo-enzymatic synthesis of (R)-(+)-aminoglutethimide by kinetic resolution of (±)-4-cyano-4-phenyl-1-hexanol. Journal of Molecular Catalysis B: Enzymatic. 2003, 26:185–191.

[2]. Egger H, Bartlett F, Itterly W, Rodebaugh R, Shimanskas C. Metabolism of aminoglutethimide in the rat. Drug Metab Dispos. 1982 Jul-Aug;10(4):405-12.

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

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA