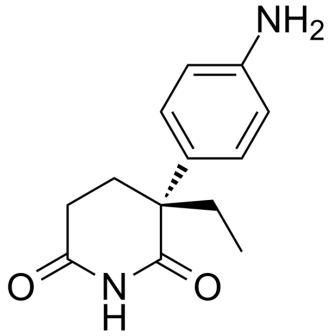
(R)-(+)-Aminoglutethimide

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

In Vitro

DMSO : 100 mg/mL (430.51 mM; Need ultrasonic)

H_2O : 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

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
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.

In Vivo

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

BIOLOGICAL ACTIVITY

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

[2].

(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.

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