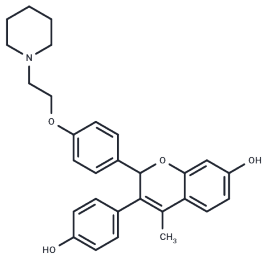
Data Sheet (Cat.No.T12654)

TargetMol

(Rac)-Acolbifene

Chemical Properties



CAS No. : 151533-34-5

Formula: C29H31NO4

Molecular Weight: 457.56

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	(Rac)-Acolbifene (EM-343) is the racemic form of Acolbifene. Acolbifene is a estrogen receptor antagonist. (Rac)-Acolbifene exhibits anti-estrogenic and estrogenic activities. (Rac)-Acolbifene contains a piperidine ring and exhibits good pharmacological profile, relative binding affinity (RBA)=380.
Targets(IC50)	Estrogen Receptor/ERR
In vitro	In T-47D cells, (Rac)-Acolbifene (0.110 nM) inhibits cell growth with an IC50 value of 0.110 nM[1].
In vivo	In ovariectomized mice, (Rac)-Acolbifene (7.5 nM, 75 nM; oral) shows shows 63% and 84% antiuterotrophic inhibitions, respectively[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (196.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (7.21 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1855 mL	10.9275 mL	21.8551 mL
5 mM	0.4371 mL	2.1855 mL	4.371 mL
10 mM	0.2186 mL	1.0928 mL	2.1855 mL
50 mM	0.0437 mL	0.2186 mL	0.4371 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Gauthier S1,et al.Synthesis and structure-activity relationships of analogs of EM-652 (acolbifene), a pure selective estrogen receptor modulator. Study of nitrogen substitution.J Enzyme Inhib Med Chem. 2005 Apr;20(2):165-77.