(Rac)-Acolbifene

Cat. No.: HY-16023B

CAS No.: 151533-34-5

Molecular Formula: $C_{29}H_{31}NO_4$

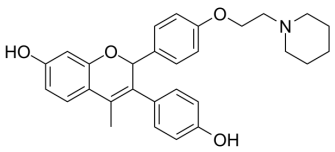
Molecular Weight: 457.56

Target: Estrogen Receptor/ERR

Pathway: Others

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 (218.55 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1855 mL	10.9275 mL	21.8551 mL
	5 mM	0.4371 mL	2.1855 mL	4.3710 mL
	10 mM	0.2186 mL	1.0928 mL	2.1855 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 (5.46 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (5.46 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

(Rac)-Acolbifene (EM-343; (Rac)-EM-652) is the racemic form of EM652 (estrogen receptor antagonist), has anti-estrogenic and estrogenic activities. (Rac)-Acolbifene (EM-343; (Rac)-EM-652) contains a piperidine ring, shows good pharmacological profile,relative binding affinity (RBA)=380[1].

In Vitro

(Rac)-Acolbifene (EM-343; (Rac)-EM-652) shows a inhibitory effect in T-47D cells with an IC_{50} value of 0.110 nM[1].

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

Cell Viability Assay[1]

Cell Line:	T-47D cells

Concentration:	0.110 nM
Incubation Time:	72 hours
Result:	Inhibited T-47D cells growth.

In Vivo

(Rac)-Acolbifene (orally adminstration; 7.5 nM, 75 nM; 9 days; once daily) shows a good pharmacological profile in ovariectomized mice, shows 63% and 84% antiuterotrophic inhibitions at the 7.5 and 75 nM doses, respectively (PK study, ovariectomized mice)[1].

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

REFERENCES

[1]. 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.

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