Estrogen receptor modulator 1

Cat. No.: HY-110201

CAS No.: 63676-22-2

Molecular Formula: $C_{14}H_{10}O_2S$

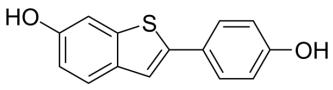
Molecular Weight: 242.29

Target: Estrogen Receptor/ERR

Pathway: Others

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (412.73 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.1273 mL	20.6364 mL	41.2729 mL
	5 mM	0.8255 mL	4.1273 mL	8.2546 mL
	10 mM	0.4127 mL	2.0636 mL	4.1273 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Estrogen receptor modulator 1 (compound 18) is an orally active and selective estrogen receptor modulator (SERM), with a pIC_{50} of 0.46. Estrogen receptor modulator 1 induces regression of Tamoxifen-resistant, hormone independent xenograft tumors[1][2].

In Vitro

Estrogen receptor modulator 1 (compound 18) (100 nM; 10 days) inhibits T47D:A18/PKCα and T47D:A18-TAM1 colony formation[2].

Estrogen receptor modulator 1 (100 nM; 9 days) significantly inhibits the growth of MCF-7:5C cell, and induces apoptosis in these cells 6 days[2].

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

Cell Proliferation Assay[2]

Cell Line:	T47D:A18/PKCα and T47D:A18-TAM1 cells
Concentration:	100 nM
Incubation Time:	10 days

Result:	Inhibit T47D:A18/PKCα and T47D:A18-TAM1 colony formation.

Cell Viability Assay[2]

Cell Line:	MCF-7:5C cells
Concentration:	100 nM
Incubation Time:	9 days
Result:	Significantly inhibited the growth of MCF-7:5C cells.

In Vivo

Estrogen receptor modulator 1 (1.5 mg/animal; p.o. ; daily for 2 weeks) results in regression of T47D:A18/PKCα tumors[2].

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

Animal Model:	4-6 week old athymic mice (Harlan-Sprague-Dawley)[2]
Dosage:	1.5 mg/animal
Administration:	p.o. ; daily for 2 weeks
Result:	Significantly reduced tumor volume.

REFERENCES

[1]. Brogi S, et al. 3D-QSAR using pharmacophore-based alignment and virtual screening for discovery of novel MCF-7 cell line inhibitors. Eur J Med Chem. 2013 Sep;67:344-51.

[2]. Molloy ME, et al. Novel selective estrogen mimics for the treatment of tamoxifen-resistant breast cancer. Mol Cancer Ther. 2014 Nov;13(11):2515-26.

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