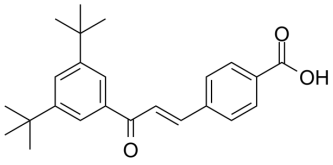
Ch55

Cat. No.:	HY-107397
CAS No.:	110368-33-7
Molecular Formula:	$C_{24}H_{28}O_3$
Molecular Weight:	364.48
Target:	RAR/RXR
Pathway:	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor
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 : 50 mg/mL (137.18 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.7436 mL	13.7182 mL	27.4363 mL
5 mM	0.5487 mL	2.7436 mL	5.4873 mL
10 mM	0.2744 mL	1.3718 mL	2.7436 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.86 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ch55 is a potent synthetic retinoid. Ch55 binds to RAR-α and RAR-β receptors with high affinity. Ch55 displays low affinity for cellular retinoic acid binding protein (CRABP). Ch55 is a potent inducer of the differentiation of HL60 cells with an EC_{50} of 200 nM. Ch55 can be used for cancer research[1][2].

In Vitro

Ch55 inhibits squamous cell differentiation of rabbit tracheal epithelial cells by inhibiting type I transglutaminase activity (EC_{50} = 0.02 nM) and increasing cholesterol sulfate levels (EC_{50} = 0.03 nM). Ch55 also induce differentiation of embryonic carcinoma F9 cells and melanoma S91 cells (EC_{50}s = 0.26 and 0.5 nM, respectively), and inhibits the induction of ornithine decarboxylase activity in 3T6 fibroblasts (EC_{50} = 1 nM)[1].

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

CUSTOMER VALIDATION

- Cell Res. 2022 Jun;32(6):513-529.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Jetten AM, et al. New benzoic acid derivatives with retinoid activity: lack of direct correlation between biological activity and binding to cellular retinoic acid binding protein. Cancer Res. 1987 Jul 1;47(13):3523-7.

[2]. Takahashi N, et al. Induction of differentiation and covalent binding to proteins by the synthetic retinoids Ch55 and Am80. Arch Biochem Biophys. 1994 Oct;314(1):82-9.

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