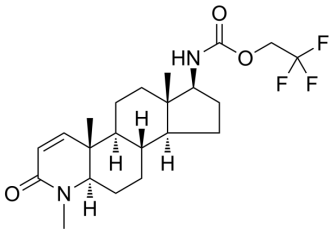
MK-4541

Cat. No.:	HY-125065
CAS No.:	796885-38-6
Molecular Formula:	$C_{22}H_{31}F_3N_2O_3$
Molecular Weight:	428.49
Target:	Androgen Receptor; 5 alpha Reductase
Pathway:	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

MK-4541 is an orally active and selective androgen receptor (AR) modulator. MK-4541 acts as an antagonist to inhibit 5α-reductase. MK-4541 inhibits proliferation and induces apoptosis in AR positive prostate cancer cells. MK-4541 significantly inhibited the growth of R3327-G prostate tumors in xenograft mouse model[1].

In Vivo

MK-4541 (100 mg/kg; p.o.; 5 times per week for 5 weeks) inhibits prostate tumor growth in athymic nude mice bearing R-3327-G cells[1].

MK-4541 (100 mg/kg, 200 mg/kg; p.o.; 5 times per week for 5 weeks) exhibits anti-androgen effects on the seminal vesicles, reduces plasma testosterone concentrations in intact males, and inhibits Ki67 expression[1].

MK-4541 (15 mg/kg, 50 mg/kg; p.o.; 5 times per week for 8 weeks) causes the loss of musculoskeletal mass and function in adult castrated mice[1].

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

Animal Model:	R3327-G prostate tumors in xenograft mouse model[1]
Dosage:	25 mg/kg, 50 mg/kg, 100 mg/kg, 200 mg/kg
Administration:	Oral gavage; once daily, 5 times per week for 5 weeks
Result:	Significantly inhibited tumor growth at 100 mg/kg, as well as reducing plasma testosterone concentration and Ki67 expression.

REFERENCES

[1]. Chisamore MJ, et al. A novel selective androgen receptor modulator (SARM) MK-4541 exerts anti-androgenic activity in the prostate cancer xenograft R-3327G and anabolic activity on skeletal muscle mass & function in castrated mice. J Steroid Biochem Mol Biol. 2016 Oct;163:88-97.

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