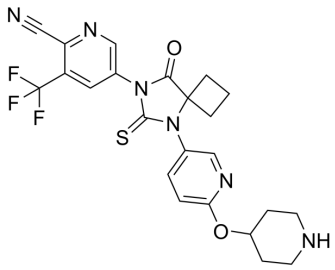
JNJ-63576253 free base

Cat. No.:	HY-115282
CAS No.:	2110426-27-0
Molecular Formula:	$C_{23}H_{21}F_3N_6O_2S$
Molecular Weight:	502.51
Target:	Androgen Receptor
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	JNJ-63576253 (TRC-253) free base is a potent and orally active full antagonist of androgen receptor (AR), with IC_{50}s of 37 and 54 nM for F877L mutant AR and wild-type AR in LNCaP cells. JNJ-63576253 free base can be used for the research of castration-resistant prostate cancer (CRPC)[1].
IC_{50} & Target	IC50: 37 nM (F877L mutant AR in LNCaP cells); 54 nM (wild-type AR in LNCaP cells)[1]
In Vitro	JNJ-63576253 (0.0003-100 μM; 5 d) inhibits the growth of VCaP cells, with an IC_{50} of 265 nM[1]. JNJ-63576253 is stable in human liver microsomes, with an $T_{1/2}$ of >180 min[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	JNJ-63576253 (30 mg/kg; p.o. once daily for 72 days) significantly inhibits the growth of prostate LNCaP SRα F877L tumor in mice[1]. JNJ-63576253 (30 mg/kg; p.o. once daily for 10 days) inhibits the five androgen sensitive organs (ASOs) under stimulation by testosterone propionate (TP) in mice[1]. JNJ-63576253 (10 mg/kg; p.o.) exhibits moderate oral bioavailability (45%), C_{max} (0.66 μM) and AUC_{last} (4.9 μg•h/mL) in mice[1]. JNJ-63576253 (2 mg/kg; i.v.) exhibits reasonable half-life (5.99 h), CL (15.0 mL/min/kg) and Vdss (6.11 L/kg) in mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Castrated SHO mice with prostate LNCaP SRα F877L tumor[1]
Dosage:	30 mg/kg
Administration:	P.o. once daily for 72 days
Result:	Inhibited the tumor growth by 87%.

Animal Model:	CD-1 male mice[1]
Dosage:	2 mg/kg for i.v.; 10 mg/kg for p.o. (Pharmacokinetic Analysis)
Administration:	Intravenous administration and oral administration

Result:	I.v.: $T_{1/2}$=5.99 h; CL=15.0 mL/min/kg; Vdss=6.11 L/kg. P.o.: F=45%; C_{max}=0.66 μM; AUC_{last}=4.9 μg•h/mL.

REFERENCES

[1]. Zhang Z, et, al. Discovery of JNJ-63576253: A Clinical Stage Androgen Receptor Antagonist for F877L Mutant and Wild-Type Castration-Resistant Prostate Cancer (mCRPC). J Med Chem. 2021 Jan 28;64(2):909-924.

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