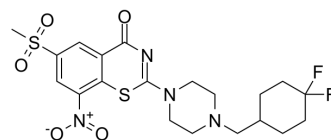


## Antitubercular agent-31

Cat. No.:	HY-151339
CAS No.:	2764818-29-1
Molecular Formula:	C <sub>20</sub> H <sub>24</sub> F <sub>2</sub> N <sub>4</sub> O <sub>5</sub> S <sub>2</sub>
Molecular Weight:	502.56
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Antitubercular agent-31 (Compound 2) is an antitubercular agent with an MIC of 0.03 μM against M. tuberculosis H37Rv. Antitubercular agent-31 also inhibits DprE1 with an IC <sub>50</sub> of 1.1 μM <sup>[1]</sup> .															
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 1.1 μM (DprE1) <sup>[1]</sup>															
<b>In Vitro</b>	Antitubercular agent-31 (Compound 2) shows aqueous solubility of 0.81 μg/mL in phosphate buffer pH 7.4. The plasma protein binding property is 97.9% <sup>[1]</sup> . Antitubercular agent-31 shows acceptable liver microsomal stability in human and mouse liver microsomes <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.															
<b>In Vivo</b>	Antitubercular agent-31 (10 or 2 mg/kg; p.o. or i.v.; once) displays an acceptable pharmacokinetics (PK) profile with only dosing i.v., shows either poor membrane permeability or rapid clearance rate in vivo <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.															
	Animal Model:	Male Balb/c mice <sup>[1]</sup>														
	Dosage:	10 mg/kg or 2 mg/kg														
	Administration:	Oral (10 mg/kg) or intravenous (2 mg/kg) administration (Pharmacokinetic Analysis)														
	Result:	PK data for Antitubercular agent-31 (Compound 2), iv, 2mg/kg <sup>[1]</sup> .														
		<table border="1"> <thead> <tr> <th>T<sub>max</sub> (h)</th> <th>C<sub>max</sub> (ng/mL)</th> <th>AUC<sub>0-t</sub> (h*ng/mL)</th> <th>AUC<sub>0-∞</sub> (h*ng/mL)</th> <th>T<sub>1/2</sub> (h)</th> <th>CL/F (mL/h/kg)</th> <th>MRT<sub>0-∞</sub> (h)</th> </tr> </thead> <tbody> <tr> <td>0.1±0.0</td> <td>463.4±103.4</td> <td>158.2±18.8</td> <td>161.3±18.6</td> <td>0.3±0.0</td> <td>12515.5±1379.7</td> <td>0.4±0.0</td> </tr> </tbody> </table>	T <sub>max</sub> (h)	C <sub>max</sub> (ng/mL)	AUC <sub>0-t</sub> (h*ng/mL)	AUC <sub>0-∞</sub> (h*ng/mL)	T <sub>1/2</sub> (h)	CL/F (mL/h/kg)	MRT <sub>0-∞</sub> (h)	0.1±0.0	463.4±103.4	158.2±18.8	161.3±18.6	0.3±0.0	12515.5±1379.7	0.4±0.0
T <sub>max</sub> (h)	C <sub>max</sub> (ng/mL)	AUC <sub>0-t</sub> (h*ng/mL)	AUC <sub>0-∞</sub> (h*ng/mL)	T <sub>1/2</sub> (h)	CL/F (mL/h/kg)	MRT <sub>0-∞</sub> (h)										
0.1±0.0	463.4±103.4	158.2±18.8	161.3±18.6	0.3±0.0	12515.5±1379.7	0.4±0.0										
		No compound signal was detected at oral administration.														

### REFERENCES

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA