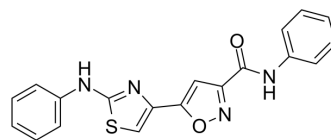


## Antitubercular agent 34

Cat. No.:	HY-151957
CAS No.:	2883173-23-5
Molecular Formula:	C <sub>19</sub> H <sub>14</sub> N <sub>4</sub> O <sub>2</sub> S
Molecular Weight:	362.41
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 34 (compound 42g) is an antitubercular agent. Antitubercular agent 34 inhibits the growth of Mtb <sub>H37Rv</sub> with a MIC <sub>90</sub> value of 1.25 µg/mL with the ability of escaping metabolic degradation by human liver microsomes. Antitubercular agent 34 can be used for the research of tuberculosis <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Antitubercular agent 34 (0-20 µg/mL; 3-4 d) shows inhibitory effect to Mtb<sub>H37Rv</sub> with a MIC<sub>90</sub> value of 1.25 µg/mL<sup>[1]</sup>. Antitubercular agent 34 (0-100 µM; 3 d) shows inhibitory effect to human monocytes THP-I cell line<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>Human monocytes THP-I cell line</td> </tr> <tr> <td>Concentration:</td> <td>1, 10, 50 and 100 µM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>Inhibited the growth of THP-I cells with an IC<sub>50</sub> value of 11.9 µg/mL.</td> </tr> </table>	Cell Line:	Human monocytes THP-I cell line	Concentration:	1, 10, 50 and 100 µM	Incubation Time:	72 hours	Result:	Inhibited the growth of THP-I cells with an IC <sub>50</sub> value of 11.9 µg/mL.
Cell Line:	Human monocytes THP-I cell line								
Concentration:	1, 10, 50 and 100 µM								
Incubation Time:	72 hours								
Result:	Inhibited the growth of THP-I cells with an IC <sub>50</sub> value of 11.9 µg/mL.								

### REFERENCES

[1]. Girardini M, et al. Expanding the knowledge around antitubercular 5-(2-aminothiazol-4-yl)isoxazole-3-carboxamides: Hit-to-lead optimization and release of a novel antitubercular chemotype via scaffold derivatization. *Eur J Med Chem.* 2023 Jan 5;245(Pt 2):114916.

**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

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