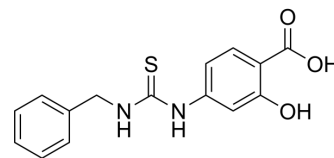


Antibacterial agent 122

Cat. No.:	HY-151356
CAS No.:	109310-99-8
Molecular Formula:	C ₁₅ H ₁₄ N ₂ O ₃ S
Molecular Weight:	302.35
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Antibacterial agent 122 (compound 15) is a thiourea derivative with anti-mycobacterial activity and low cytotoxicity. Antibacterial agent 122 can be used for tuberculosis-related studies ^[1] .
In Vitro	Antibacterial agent 122 (compound 15) (25-200 μM, 24 h) inhibits <i>M. tuberculosis</i> H37Rv with the MIC ₅₀ value of 5.9 μM and inhibits NO production in LPS-stimulated RAW 264.7 cell cultures with an IC ₅₀ value of 8.1 μM ^[1] . Antibacterial agent 122 (compound 15) (25-200 μM) acts on NO scavenging with an IC ₅₀ value of 184.2 μM, and almost completely inhibits iNOS expression in LPS-stimulated RAW264.7 macrophages at a concentration of 100 μM ^[1] . Antibacterial agent 122 (compound 15) (0-200 μM, 24 h) inhibits TNF-α and IL-1β production in LPS-stimulated macrophages with the IC ₅₀ values of 28.4 μM and 47.9 μM, respectively ^[1] . Antibacterial agent 122 (compound 15) (25-100 μM, 4 days) inhibits <i>M. tuberculosis</i> M299 with an MIC ₅₀ value of 24.7 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sanderson Dias Calixto, et al. Antimycobacterial and anti-inflammatory activities of thiourea derivatives focusing on treatment approaches for severe pulmonary tuberculosis. *Bioorg Med Chem.* 2022 Jan 1;53:116506.

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