

## **Product** Data Sheet

Inhibitors

**Screening Libraries** 

**Proteins** 

# **Antileishmanial agent-17**

 Cat. No.:
 HY-149958

 CAS No.:
 2934738-40-4

 Molecular Formula:
  $C_{27}H_{37}N_5O_5$ 

Molecular Weight: 511.61

Target: Parasite

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

### **BIOLOGICAL ACTIVITY**

Description	Antileishmanial agent-17 is a coumarin hybrid compound with antileishmanial effects (IC $_{50}$ <0.78 $\mu$ M). Antileishmanial agent-17 is safe to normal VERO cells. Antileishmanial agent-17 binds to folate pathway enzymes pteridine reductase and DHFR-TS. And Antileishmanial agent-17 shows the most potent with IC $_{50}$ value of 0.40 $\mu$ M against promastigote and 0.68 $\mu$ M against amastigote, respectivley.
In Vitro	Antileishmanial agent-17 (compound 14b) inhibits folate pathway with inhibitory rates of 82% and 91% against Folic acid, and 88% and 91% against Folinic acid, with 20 $\mu$ M and 100 $\mu$ M, respectivley <sup>[1]</sup> . Antileishmanial agent-17 shows insignificant cytotoxicity against African green monkey kidney cells (VERO cells), with CC <sub>50</sub> of 244.3 $\mu$ M <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

[1]. Hassan NW, et al. Modulating leishmanial pteridine metabolism machinery via some new coumarin-1,2,3-triazoles: Design, synthesis and computational studies. Eur J Med Chem. 2023 May 5;253:115333.

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

Page 1 of 1