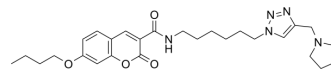


Antileishmanial agent-16

| | |
|--------------------|---|
| Cat. No.: | HY-149957 |
| CAS No.: | 2934738-41-5 |
| Molecular Formula: | C ₂₇ H ₃₇ N ₅ O ₄ |
| Molecular Weight: | 495.61 |
| Target: | Parasite |
| Pathway: | Anti-infection |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | | | | | | | | | |
|-------------------------------------|---|------------|--|----------------|---------|------------------|------|---------|--|
| Description | Antileishmanial agent-16 (compound 14c) is an anti-Leishmania agent. Antileishmanial agent-16 has superior anti-Leishmania major promastigotes activity (IC ₅₀ = 0.59 μM) and anti-Leishmania major amastigotes activity (IC ₅₀ = 0.81 μM). Antileishmanial agent-16 has good safety to mammalian cells (VERO cells) ^[1] . | | | | | | | | |
| IC₅₀ & Target | Leishmania ^[1] . | | | | | | | | |
| In Vitro | <p>Antileishmanial agent-16 (0-20 μM; 24 h) shows superior activity to againsts L. Major promastigote and amastigote forms, with IC₅₀s of 0.59 and 0.81 μM, respectively^[1].</p> <p>Antileishmanial agent-16 shows high selectivity towards L. amastigote as well as their safety on mammalian cells (VERO cells), with anSI value of 311.4^[1].</p> <p>Selectivity indice (SI): the ratio between the in vitro cytotoxic activity (CC₅₀ in μM) and the antileishmanial activity against amastigote form (unit of IC₅₀: μM).</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Promastigote and amastigote forms of Leishmania major strain</td> </tr> <tr> <td>Concentration:</td> <td>0-20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited L. Major promastigote and amastigote forms, with IC₅₀s of 0.59 and 0.81 μM, respectively.</td> </tr> </table> | Cell Line: | Promastigote and amastigote forms of Leishmania major strain | Concentration: | 0-20 μM | Incubation Time: | 24 h | Result: | Inhibited L. Major promastigote and amastigote forms, with IC ₅₀ s of 0.59 and 0.81 μM, respectively. |
| Cell Line: | Promastigote and amastigote forms of Leishmania major strain | | | | | | | | |
| Concentration: | 0-20 μM | | | | | | | | |
| Incubation Time: | 24 h | | | | | | | | |
| Result: | Inhibited L. Major promastigote and amastigote forms, with IC ₅₀ s of 0.59 and 0.81 μM, respectively. | | | | | | | | |

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.

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