# Antimalarial agent 16

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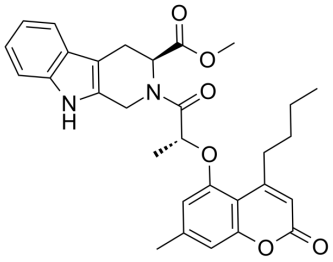
| **Cat. No.:** | HY-150066 |
| **CAS No.:** | 2773408-33-4 |
| **Molecular Formula:** | $C_{30}H_{32}N_2O_6$ |
| **Molecular Weight:** | 516.58 |
| **Target:** | Parasite |
| **Pathway:** | Anti-infection |
| **Storage:** | Please store the product under the recommended conditions in the Certificate of Analysis. |



## BIOLOGICAL ACTIVITY

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| **Description** | Antimalarial agent 16 (Compound 4h) is a parasite inhibitor. Antimalarial agent 16 shows antimalarial activity, and can inhibit P. falciparum parasite growth ($IC_{50}$=2.0 nM)[1]. |
| **$IC_{50}$ & Target** | IC50: 2.0 nM (P. falciparum)[1] |
| **In Vivo** | Antimalarial agent 16 (i.p.; 40 or 200 mg/kg; once daily; 4 days) exhibits significant in vivo antimalarial effects[1].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

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| Animal Model: | Plasmodium berghei (P. berghei) ANKA infected ICR mouse[1] |
| Dosage: | 40 or 200 mg/kg |
| Administration: | Intraperitoneal injection; 40 or 200 mg/kg; once daily; 4 days |
| Result: | Inhibited malaria parasite growth effectively and retained parasitemia levels until day 8 post-infection at a dose of 40 mg/kg, attenuated parasitemia levels until day 8. Maintained survival rates until day 11 post-infection, but the rates decreased rapidly after day 11 at a dose of 40 mg/kg, observed a significant enhancement in survival a dose of 200 mg/kg. |

## REFERENCES

[1]. Nobuo Cho, et al. New antimalarials identified by a cell-based phenotypic approach: Structure-activity relationships of 2,3,4,9-tetrahydro-1H-β-carboline derivatives possessing a 2-((coumarin-5-yl)oxy)alkanoyl moiety. Bioorg Med Chem. 2022 Jul 15;66:116830.

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

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