## **Product** Data Sheet

## **Antifungal agent 40**

Molecular Weight: 490.29
Target: Fungal

Pathway: Anti-infection

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

Analysis.

## **BIOLOGICAL ACTIVITY**

| Description               | Antifungal agent 40 is an antifungal agent which extends into the narrow hydrophobic pocket II of <i>C.alb.</i> CYP51. Antifungal agent 40 has an inhibitory effect on lanosterol $14\alpha$ -demethylase (CYP51). Antifungal agent 40 inhibits biofilm formation <sup>[1]</sup> .  |
|---------------------------|---|
| IC <sub>50</sub> & Target | CYP51 <sup>[1]</sup>  |
| In Vitro                  | Antifungal agent 40 (compound A03, 0.25-128 $\mu$ g/mL) inhibits fungal activity with MIC values of 1-64 $\mu$ g/mL <sup>[1]</sup> . Antifungal agent 40 (1-8 $\mu$ g/mL, 16 h) inhibits lanosterol 14 $\alpha$ -demethylase (CYP51) of C.alb (GC-MS analysis) <sup>[1]</sup> . Antifungal agent 40 (0.5 $\mu$ g/mL, 1.5-24 h) displays antibiofilm activity against FCZ-Resistant C.alb <sup>[1]</sup> . Antifungal agent 40 (0-10 $\mu$ M respectively) shows cytotoxicity against HL-60, MDA-MB-231 and PC-3 cells with IC <sub>50</sub> values of 5.18, 3.25, 0.98 $\mu$ M respectively <sup>[1]</sup> . Antifungal agent 40 (2-32 $\mu$ g/mL, 3 h) displays high hemolysis rate in rabbit erythrocyte <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## **REFERENCES**

[1]. Hang Xu, et al. Discovery of novel selenium-containing azole derivatives as antifungal agents by exploiting the hydrophobic cleft of CYP51. Eur J Med Chem. 2022 Aug 28;243:114707.

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

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