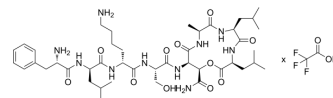


## Clovibactin TFA

|                             |  |
|-----------------------------|--|
| <b>Cat. No.:</b>            | HY-P10027A   |
| <b>Molecular Formula:</b>   | C <sub>43</sub> H <sub>70</sub> N <sub>10</sub> O <sub>11</sub> .xC <sub>2</sub> HF <sub>3</sub> O <sub>2</sub>  |
| <b>Sequence:</b>            | Phe-[d-Leu]-[d-Lys]-Ser-[Hyn]-Ala-Leu-Leu (Cyclic ester: Hyn5-Leu8)  |
| <b>Sequence Shortening:</b> | F-[d-Leu]-[d-Lys]-S-[Hyn]-ALL (Cyclic ester: Hyn5-Leu8)  |
| <b>Target:</b>              | Antibiotic; Bacterial  |
| <b>Pathway:</b>             | Anti-infection   |
| <b>Storage:</b>             | Sealed storage, away from moisture and light<br>Powder    -80°C    2 years<br>-20°C    1 year<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light) |



### SOLVENT & SOLUBILITY

|                 |                                    |
|-----------------|------------------------------------|
| <b>In Vitro</b> | DMSO : 100 mg/mL (Need ultrasonic) |
|-----------------|------------------------------------|

### BIOLOGICAL ACTIVITY

|                    |  |
|--------------------|--|
| <b>Description</b> | Clovibactin TFA is the TFA salt form of Clovibactin (HY-P10027). Clovibactin TFA is an antibiotic for drug-resistant bacterial pathogens without detectable resistance. Clovibactin TFA inhibits cell wall synthesis by targeting pyrophosphate of peptidoglycan precursors <sup>[1]</sup> .   |
| <b>In Vitro</b>    | Clovibactin TFA inhibits Staphylococcus strains with MICs of 0.125-2 µg/mL <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only.   |
| <b>In Vivo</b>     | Clovibactin TFA (20 mg/kg, iv, single dose) exhibits a pharmacokinetic profile with a C <sub>max</sub> of 219.3 µg/mL, an AUC <sub>to last</sub> of 31.9 µg·h/mL, t <sub>1/2</sub> of 2 h, CL of 9.4 mL/kg/min and a V <sub>dss</sub> of 189.8 mL/kg in mice model <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

### REFERENCES

[1]. Shukla R, et al., A new antibiotic from an uncultured bacterium binds to an immutable target. bioRxiv [Preprint]. 2023 May 15:2023.05.15.540765.

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

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