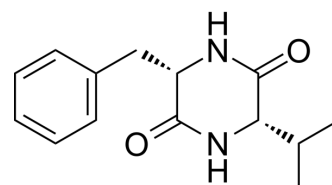


## Cyclo(L-Phe-L-Val)

|                    |   |
|--------------------|---|
| Cat. No.:          | HY-121982   |
| CAS No.:           | 35590-86-4  |
| Molecular Formula: | C <sub>14</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub> |
| Molecular Weight:  | 246.3   |
| Target:            | Fungal  |
| Pathway:           | Anti-infection  |
| Storage:           | Sealed storage, away from moisture                            |
|                    | Powder    -80°C    2 years                                    |
|                    | -20°C    1 year   |



\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 8.33 mg/mL (33.82 mM); ultrasonic and warming and heat to 70°C)

| Concentration | Mass      |            |            |
|---------------|-----------|------------|------------|
|               | 1 mg      | 5 mg       | 10 mg      |
| 1 mM          | 4.0601 mL | 20.3004 mL | 40.6009 mL |
| 5 mM          | 0.8120 mL | 4.0601 mL  | 8.1202 mL  |
| 10 mM         | 0.4060 mL | 2.0300 mL  | 4.0601 mL  |

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

|                                     |   |
|-------------------------------------|---|
| <b>Description</b>                  | Cyclo(L-Phe-L-Val) is a potent inhibitor of enzymes isocitrate lyase (ICL) (IC <sub>50</sub> =27 µg/mL). cyclo(L-Phe-L-Val) inhibits the gene transcription of ICL in <i>C. albicans</i> under C <sub>2</sub> -carbon-utilizing conditions <sup>[1]</sup> .               |
| <b>IC<sub>50</sub> &amp; Target</b> | Isocitrate lyase (ICL) <sup>[1]</sup>   |
| <b>In Vitro</b>                     | Cyclo(L-Phe-L-Val) (32 µg/mL; 2 d) decreases icl product in <i>C. albicans</i> SC5314 (wild-type), MRC10 (Δicl), and MRC11 (Δicl + ICL), respectively <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

### REFERENCES

[1]. Kim H, et al. Inhibitory Effects of Diketopiperazines from Marine-Derived *Streptomyces puniceus* on the Isocitrate Lyase of *Candida albicans*. *Molecules*. 2019 Jun 4;24(11):2111.

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

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