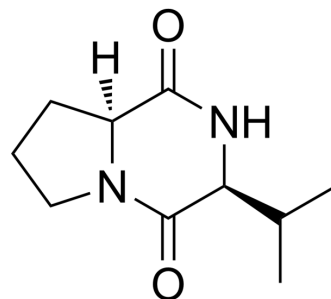


## Cyclo(L-Pro-L-Val)

|                             |   |
|-----------------------------|---|
| <b>Cat. No.:</b>            | HY-P1938  |
| <b>CAS No.:</b>             | 2854-40-2   |
| <b>Molecular Formula:</b>   | C <sub>10</sub> H <sub>16</sub> N <sub>2</sub> O <sub>2</sub> |
| <b>Molecular Weight:</b>    | 196.25  |
| <b>Sequence:</b>            | Cyclo(Pro-Val)  |
| <b>Sequence Shortening:</b> | Cyclo(PV)   |
| <b>Target:</b>              | Bacterial   |
| <b>Pathway:</b>             | Anti-infection  |
| <b>Storage:</b>             | Sealed storage, away from moisture and light, under nitrogen  |
|                             | Powder    -80°C    2 years                                    |
|                             | -20°C    1 year   |



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

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (509.55 mM; Need ultrasonic)

| Concentration             | Solvent | Mass      |            |            |
|---------------------------|---------|-----------|------------|------------|
|                           |         | 1 mg      | 5 mg       | 10 mg      |
| Preparing Stock Solutions | 1 mM    | 5.0955 mL | 25.4777 mL | 50.9554 mL |
|                           | 5 mM    | 1.0191 mL | 5.0955 mL  | 10.1911 mL |
|                           | 10 mM   | 0.5096 mL | 2.5478 mL  | 5.0955 mL  |

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

### BIOLOGICAL ACTIVITY

#### Description

Cyclo(L-Pro-L-Val) is a 2,5-diketopiperazine, with toxic activity against phytopathogenic microorganisms (such as *R. fascians* LMG 3605). Cyclo(L-Pro-L-Val) shows toxicity similar to Chloramphenicol (HY-B0239) with comparable concentration. Cyclo(L-Pro-L-Val) can also inhibit gram-positive phytopathogenic bacterium. Cyclo(L-Pro-L-Val) has potential development as biopesticide<sup>[1]</sup>.

### REFERENCES

[1]. Cimmino A, et al. Isolation of 2,5-diketopiperazines from *Lysobacter capsici* AZ78 with activity against *Rhodococcus fascians*. *Nat Prod Res.* 2021 Dec;35(23):4969-4977.

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

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