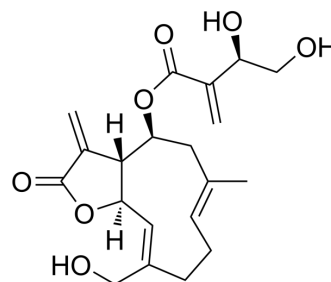


## Cnicin

|                    |  |
|--------------------|--|
| Cat. No.:          | HY-137984  |
| CAS No.:           | 24394-09-0   |
| Molecular Formula: | C <sub>20</sub> H <sub>26</sub> O <sub>7</sub>   |
| Molecular Weight:  | 378.42   |
| Target:            | SARS-CoV   |
| Pathway:           | Anti-infection   |
| Storage:           | -20°C, protect from light<br>* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light) |



### SOLVENT & SOLUBILITY

|   |  |                       |      |       |           |            |            |
|---|--|-----------------------|------|-------|-----------|------------|------------|
| In Vitro  | DMSO : 100 mg/mL (264.26 mM; Need ultrasonic)  |                       |      |       |           |            |            |
|   | Preparing Stock Solutions  | Solvent Concentration | Mass | 1 mg  | 5 mg      | 10 mg      |            |
|   |  |                       |      | 1 mM  | 2.6426 mL | 13.2128 mL | 26.4257 mL |
|   |  |                       |      | 5 mM  | 0.5285 mL | 2.6426 mL  | 5.2851 mL  |
|   |  |                       |      | 10 mM | 0.2643 mL | 1.3213 mL  | 2.6426 mL  |
| Please refer to the solubility information to select the appropriate solvent. |  |                       |      |       |           |            |            |
| In Vivo   | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: ≥ 2.5 mg/mL (6.61 mM); Clear solution |                       |      |       |           |            |            |
|   | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: ≥ 2.5 mg/mL (6.61 mM); Clear solution            |                       |      |       |           |            |            |
|   | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 2.5 mg/mL (6.61 mM); Clear solution                            |                       |      |       |           |            |            |

### BIOLOGICAL ACTIVITY

|             |   |
|-------------|---|
| Description | Cnicin is a sesquiterpene lactone. Cnicin has antiproliferative effects, and induces cell death in primary myeloma cells. Cnicin also has anti-SARS-CoV-2 activity. Cnicin inhibits viral replication of SARS CoV-2 with an IC <sub>50</sub> of 1.18 μg/mL <sup>[1]</sup> . |
|-------------|---|

### REFERENCES

[1]. Jöhner K, et al. Antimyeloma activity of the sesquiterpene lactone cnicin: impact on Pim-2 kinase as a novel therapeutic target. J Mol Med (Berl). 2012 Jun;90(6):681-93.

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[2]. Alhadrami HA, et al. Cnicin as an Anti-SARS-CoV-2: An Integrated In Silico and In Vitro Approach for the Rapid Identification of Potential COVID-19 Therapeutics. Antibiotics (Basel). 2021 May 7;10(5):542.

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

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