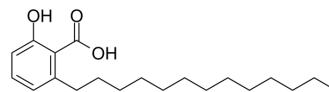


## Ginkgolic Acid (C13:0)

|                    |  |
|--------------------|--|
| Cat. No.:          | HY-N0078   |
| CAS No.:           | 20261-38-5   |
| Molecular Formula: | C <sub>20</sub> H <sub>32</sub> O <sub>3</sub>   |
| Molecular Weight:  | 320.47   |
| Target:            | Bacterial  |
| Pathway:           | Anti-infection   |
| Storage:           | 4°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 (312.04 mM; Need ultrasonic)   |                       |      |       |           |            |            |
|   | Preparing Stock Solutions   | Solvent Concentration | Mass | 1 mg  | 5 mg      | 10 mg      |            |
|   |   |                       |      | 1 mM  | 3.1204 mL | 15.6021 mL | 31.2042 mL |
|   |   |                       |      | 5 mM  | 0.6241 mL | 3.1204 mL  | 6.2408 mL  |
|   |   |                       |      | 10 mM | 0.3120 mL | 1.5602 mL  | 3.1204 mL  |
| Please refer to the solubility information to select the appropriate solvent. |   |                       |      |       |           |            |            |
| In Vivo   | 1. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 2.5 mg/mL (7.80 mM); Clear solution |                       |      |       |           |            |            |

### BIOLOGICAL ACTIVITY

|             |   |
|-------------|---|
| Description | <p>Ginkgolic Acid (C13:0) is a natural anticarcinogenic agent in that it exhibits antimicrobial activity against <i>S. mutans</i> and suppresses the specific virulence factors associated with its cariogenicity. IC50 value: Inhibiting the biofilm formation of <i>S. mutans</i> (MBIC (50) = 4 µg/mL); reduced 1-day-developed biofilm of <i>S. mutans</i> by 50 % or more at low concentration (MBRC (50) = 32 µg/mL). Target: In vitro: Ginkgolic Acid (C13:0) inhibited not only the growth of <i>S. mutans</i> planktonic cells at minimum inhibitory concentration (MIC) of 4 µg/mL and minimum bactericidal concentration (MBC) of 8 µg/mL but also the acid production and adherence to saliva-coated hydroxyapatite of <i>S. mutans</i> at sub-MIC concentration. In addition, this agent was effective in inhibiting the biofilm formation of <i>S. mutans</i> (MBIC (50) = 4 µg/mL), and it reduced 1-day-developed biofilm of <i>S. mutans</i> by 50 % or more at low concentration (MBRC (50) = 32 µg/mL). Furthermore Ginkgolic Acid (C13:0) disrupted biofilm integrity effectively [1]. In vivo:</p> |
|-------------|---|

### REFERENCES

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[1]. He J, et al. Effects of ginkgoneolic acid on the growth, acidogenicity, adherence, and biofilm of *Streptococcus mutans* in vitro. *Folia Microbiol (Praha)*. 2013 Mar;58(2):147-53.

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

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