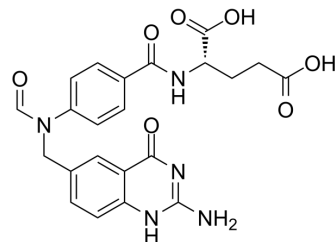


## 10-Formyl-5,8-dideazafolic acid

|                    |   |       |          |
|--------------------|---|-------|----------|
| Cat. No.:          | HY-143207   |       |          |
| CAS No.:           | 61038-31-1  |       |          |
| Molecular Formula: | C <sub>22</sub> H <sub>21</sub> N <sub>5</sub> O <sub>7</sub> |       |          |
| Molecular Weight:  | 467.43  |       |          |
| Target:            | Thymidylate Synthase  |       |          |
| Pathway:           | Apoptosis   |       |          |
| Storage:           | Powder  | -20°C | 3 years  |
|                    |   | 4°C   | 2 years  |
|                    | In solvent  | -80°C | 6 months |
|                    |   | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

|   |   |                          |              |            |            |
|---|---|--------------------------|--------------|------------|------------|
| In Vitro  | DMSO : 50 mg/mL (106.97 mM; Need ultrasonic)  |                          |              |            |            |
|   |   | Solvent<br>Concentration | Mass<br>1 mg | 5 mg       | 10 mg      |
|   | Preparing Stock Solutions   | 1 mM                     | 2.1394 mL    | 10.6968 mL | 21.3936 mL |
|   |   | 5 mM                     | 0.4279 mL    | 2.1394 mL  | 4.2787 mL  |
| 10 mM   |   | 0.2139 mL                | 1.0697 mL    | 2.1394 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: ≥ 1.25 mg/mL (2.67 mM); Clear solution |                          |              |            |            |
|   | 2. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 1.25 mg/mL (2.67 mM); Clear solution                            |                          |              |            |            |

### BIOLOGICAL ACTIVITY

|                           |  |
|---------------------------|--|
| Description               | 10-Formyl-5,8-dideazafolic acid is a thymidylate synthase inhibitor <sup>[1]</sup> . |
| IC <sub>50</sub> & Target | thymidylate synthase <sup>[1]</sup>  |

### REFERENCES

[1]. Reddy MR, et, al. Calculation of solvation and binding free energy differences for folate-based inhibitors of the enzyme thymidylate synthase. J. Am. Chem. Soc. 1992, 114, 26, 10117-10122.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA