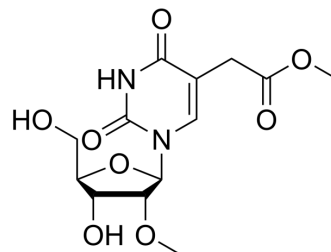


## 5-Methoxycarbonylmethyl-2'-O-methyluridine

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-W393317   |
| <b>CAS No.:</b>           | 60197-31-1   |
| <b>Molecular Formula:</b> | C <sub>13</sub> H <sub>18</sub> N <sub>2</sub> O <sub>8</sub>                                  |
| <b>Molecular Weight:</b>  | 330.29   |
| <b>Target:</b>            | Nucleoside Antimetabolite/Analog   |
| <b>Pathway:</b>           | Cell Cycle/DNA Damage  |
| <b>Storage:</b>           | 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 (302.76 mM; Need ultrasonic)  
Methanol : 62.5 mg/mL (189.23 mM; Need ultrasonic)

| Solvent                   | Mass  | Concentration |            |            |
|---------------------------|-------|---------------|------------|------------|
|                           |       | 1 mg          | 5 mg       | 10 mg      |
| Preparing Stock Solutions | 1 mM  | 3.0276 mL     | 15.1382 mL | 30.2764 mL |
|                           | 5 mM  | 0.6055 mL     | 3.0276 mL  | 6.0553 mL  |
|                           | 10 mM | 0.3028 mL     | 1.5138 mL  | 3.0276 mL  |
|                           |       |               |            |            |

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (7.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (7.57 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (7.57 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

5-Methoxycarbonylmethyl-2'-O-methyluridine is a thymidine analogue. Analogs of this series have insertional activity towards replicated DNA. They can be used to label cells and track DNA synthesis<sup>[1]</sup>.

### REFERENCES

- [1]. Cavanagh BL, et al. Thymidine analogues for tracking DNA synthesis. *Molecules*. 2011 Sep 15;16(9):7980-93.

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

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