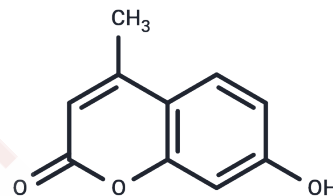


## 4-Methylumbelliferone

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 90-33-5   |
| Formula:          | C <sub>10</sub> H <sub>8</sub> O <sub>3</sub>   |
| Molecular Weight: | 176.17  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |



## Biological Description

|               |  |
|---------------|--|
| Description   | 4-Methylumbelliferone (Hymecromone) is a coumarin derivative possessing properties as a spasmolytic, choleric and light-protective agent. It is also used in ANALYTICAL CHEMISTRY TECHNIQUES for the determination of NITRIC ACID. |
| Targets(IC50) | Others   |

## Solubility Information

|                     |   |
|---------------------|---|
| Solubility          | H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble),<br>Ethanol: 33 mg/mL (187.32 mM),Sonication is recommended.<br>DMSO: 250 mg/mL (1419.08 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble)  |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (22.71 mM),Sonication is recommended.<br><i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 5.6763 mL | 28.3817 mL | 56.7634 mL |
| 5 mM  | 1.1353 mL | 5.6763 mL  | 11.3527 mL |
| 10 mM | 0.5676 mL | 2.8382 mL  | 5.6763 mL  |
| 50 mM | 0.1135 mL | 0.5676 mL  | 1.1353 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Berman HM, et al. Nucleic Acids Res. 2000 Jan 1;28(1):235-42.

Chen J, Meng J, Jin C, et al. 4-Methylumbelliferone treatment and hyaluronan inhibition as a therapeutic strategy for chronic prostatitis. The Prostate. 2021, 81(14): 1078-1090.

Hu H, Wang X, Wu Z, et al. Overexpression of the Polygonum cuspidatum PcDREB2A Gene Encoding a DRE-Binding Transcription Factor Enhances the Drought Tolerance of Transgenic Arabidopsis thaliana. Journal of Plant Biology. 2021: 1-11.

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