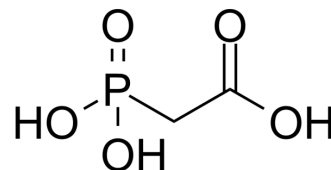


## Phosphonoacetic acid

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-128744  |
| <b>CAS No.:</b>           | 4408-78-0  |
| <b>Molecular Formula:</b> | C <sub>2</sub> H <sub>3</sub> O <sub>5</sub> P   |
| <b>Molecular Weight:</b>  | 140.03   |
| <b>Target:</b>            | Endogenous Metabolite; Orthopoxvirus   |
| <b>Pathway:</b>           | Metabolic Enzyme/Protease; Anti-infection  |
| <b>Storage:</b>           | 4°C, sealed storage, away from moisture<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



### SOLVENT & SOLUBILITY

|   |   |                      |             |             |             |              |
|---|---|----------------------|-------------|-------------|-------------|--------------|
| <b>In Vitro</b>   | H <sub>2</sub> O : 260 mg/mL (1856.74 mM; Need ultrasonic)  |                      |             |             |             |              |
|   | <b>Preparing Stock Solutions</b>  | <b>Solvent</b>       | <b>Mass</b> | <b>1 mg</b> | <b>5 mg</b> | <b>10 mg</b> |
|   |   | <b>Concentration</b> |             |             |             |              |
|   |   | <b>1 mM</b>          |             | 7.1413 mL   | 35.7066 mL  | 71.4133 mL   |
|   |   | <b>5 mM</b>          |             | 1.4283 mL   | 7.1413 mL   | 14.2827 mL   |
| <b>10 mM</b>  |   | 0.7141 mL            | 3.5707 mL   | 7.1413 mL   |             |              |
| Please refer to the solubility information to select the appropriate solvent. |   |                      |             |             |             |              |
| <b>In Vivo</b>  | 1. Add each solvent one by one: PBS<br>Solubility: 100 mg/mL (714.13 mM); Clear solution; Need ultrasonic |                      |             |             |             |              |

### BIOLOGICAL ACTIVITY

|                                     |  |
|-------------------------------------|--|
| <b>Description</b>                  | Phosphonoacetic acid is an endogenous metabolite. Phosphonoacetic acid also has anti-orthopoxvirus activity <sup>[1]</sup> . |
| <b>IC<sub>50</sub> &amp; Target</b> | Human Endogenous Metabolite  |

### REFERENCES

[1]. Donald F Smee, et al. A review of compounds exhibiting anti-orthopoxvirus activity in animal models. Antiviral Res. 2003 Jan;57(1-2):41-52.

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

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