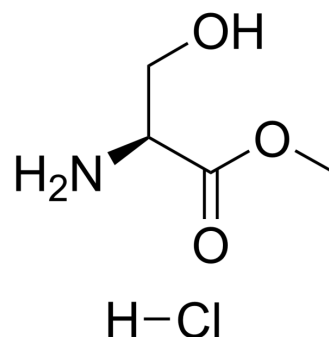


## L-Serine methyl ester hydrochloride

|                           |  |       |          |
|---------------------------|--|-------|----------|
| <b>Cat. No.:</b>          | HY-32687A  |       |          |
| <b>CAS No.:</b>           | 5680-80-8  |       |          |
| <b>Molecular Formula:</b> | C <sub>4</sub> H <sub>10</sub> ClNO <sub>3</sub> |       |          |
| <b>Molecular Weight:</b>  | 155.58   |       |          |
| <b>Target:</b>            | Amino Acid Derivatives                           |       |          |
| <b>Pathway:</b>           | Others   |       |          |
| <b>Storage:</b>           | Powder   | -20°C | 3 years  |
|                           |  | 4°C   | 2 years  |
|                           | In solvent                                       | -80°C | 6 months |
|                           |  | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : ≥ 100 mg/mL (642.76 mM)  
 DMSO : 100 mg/mL (642.76 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

|                              | Solvent<br>Concentration | Mass      |            |            |
|------------------------------|--------------------------|-----------|------------|------------|
|                              |                          | 1 mg      | 5 mg       | 10 mg      |
| Preparing<br>Stock Solutions | 1 mM                     | 6.4276 mL | 32.1378 mL | 64.2756 mL |
|                              | 5 mM                     | 1.2855 mL | 6.4276 mL  | 12.8551 mL |
|                              | 10 mM                    | 0.6428 mL | 3.2138 mL  | 6.4276 mL  |

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

### BIOLOGICAL ACTIVITY

#### Description

L-Serine methyl ester (hydrochloride) is a serine derivative<sup>[1]</sup>.

#### In Vitro

Amino acids and amino acid derivatives have been commercially used as ergogenic supplements. They influence the secretion of anabolic hormones, supply of fuel during exercise, mental performance during stress related tasks and prevent exercise induced muscle damage. They are recognized to be beneficial as ergogenic dietary substances<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Luckose F, et al. Effects of amino acid derivatives on physical, mental, and physiological activities. Crit Rev Food Sci Nutr. 2015;55(13):1793-1144.

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

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