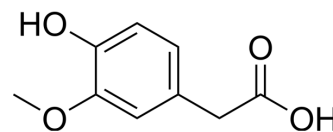


## Homovanillic acid

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-N0384   |
| <b>CAS No.:</b>           | 306-08-1   |
| <b>Molecular Formula:</b> | C <sub>9</sub> H <sub>10</sub> O <sub>4</sub>  |
| <b>Molecular Weight:</b>  | 182.17   |
| <b>Target:</b>            | Endogenous Metabolite; Drug Metabolite   |
| <b>Pathway:</b>           | Metabolic Enzyme/Protease  |
| <b>Storage:</b>           | 4°C, protect from light, stored under nitrogen<br>* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen) |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (548.94 mM)  
 H<sub>2</sub>O : 8.33 mg/mL (45.73 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

|                              | Solvent<br>Concentration | Mass      |            |            |
|------------------------------|--------------------------|-----------|------------|------------|
|                              |                          | 1 mg      | 5 mg       | 10 mg      |
| Preparing<br>Stock Solutions | 1 mM                     | 5.4894 mL | 27.4469 mL | 54.8938 mL |
|                              | 5 mM                     | 1.0979 mL | 5.4894 mL  | 10.9788 mL |
|                              | 10 mM                    | 0.5489 mL | 2.7447 mL  | 5.4894 mL  |

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 20 mg/mL (109.79 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (13.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (13.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (13.72 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Homovanillic acid is a dopamine metabolite found to be associated with aromatic L-amino acid decarboxylase deficiency, celiac disease, growth hormone deficiency, and sepiapterin reductase deficiency.

#### IC<sub>50</sub> & Target

|                      |                             |
|----------------------|-----------------------------|
| Microbial Metabolite | Human Endogenous Metabolite |
|----------------------|-----------------------------|

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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