

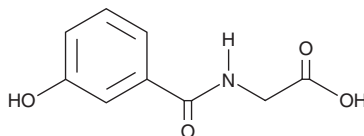
# PRODUCT INFORMATION



## 3-Hydroxyhippuric Acid

Item No. 37240

**CAS Registry No.:** 1637-75-8  
**Formal Name:** N-(3-hydroxybenzoyl)-glycine  
**Synonyms:** *m*-Hydroxyhippuric Acid,  
*meta*-Hydroxyhippuric Acid  
**MF:** C<sub>9</sub>H<sub>9</sub>NO<sub>4</sub>  
**FW:** 195.2  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

3-Hydroxyhippuric acid is supplied as a solid. A stock solution may be made by dissolving the 3-hydroxyhippuric acid in the solvent of choice, which should be purged with an inert gas. 3-Hydroxyhippuric acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 3-hydroxyhippuric acid in these solvents is approximately 10 and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 3-hydroxyhippuric acid can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 3-hydroxyhippuric acid in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

3-Hydroxyhippuric acid is a polyphenol metabolite.<sup>1</sup> It is an active metabolite of various polyphenols, including the flavonoid (+)-catechin (Item No. 70940), and is formed by glycine conjugation *via* gut microbiota. 3-Hydroxyhippuric acid inhibits kynureninase ( $K_i = 60 \mu\text{M}$ ).<sup>2</sup>

### References

- Gonthier, M.-P., Cheyner, V., Donovan, J.L., *et al.* Microbial aromatic acid metabolites formed in the gut account for a major fraction of the polyphenols excreted in urine of rats fed red wine polyphenols. *J. Nutr.* **133**(2), 461-467 (2003).
- Lima, S., Kumar, S., Gawandi, V., *et al.* Crystal structure of the *Homo sapiens* kynureninase-3-hydroxyhippuric acid inhibitor complex: Insights into the molecular basis of kynureninase substrate specificity. *J. Med. Chem.* **52**(2), 389-396 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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