# PRODUCT INFORMATION



## 4-Aminohippuric Acid

Item No. 23726

CAS Registry No.: 61-78-9

N-(4-aminobenzoyl)-glycine Formal Name:

Synonyms: p-Aminohippuric Acid, para-Aminohippuric Acid,

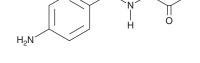
NSC 7550, NSC 13064

MF:  $C_9H_{10}N_2O_3$ 194.2 FW: ≥98% **Purity:** UV/Vis.:  $\lambda_{max}$ : 283 nm Supplied as: A solid

Storage: Room temperature

Stability: ≥4 years

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



#### **Laboratory Procedures**

4-Aminohippuric acid is supplied as a solid. A stock solution may be made by dissolving the 4-aminohippuric acid in the solvent of choice. 4-Aminohippuric acid is slightly soluble in chloroform, methanol, and DMSO.

#### Description

4-Aminohippuric acid is a substrate for various renal transporters that has been used in the study of anion uptake in the kidney. It is a substrate for organic anion transporter 1 (OAT1;  $K_m = 14.3 \mu M$  in X. laevis oocytes), the human inorganic phosphate transporter (NPT1;  $K_m$  = 2.66 mM in HEK293 cells), and apical multidrug resistance protein (MDR2;  $K_m$  = 880  $\mu$ M in HEK293 cells). 4-Aminohippuric acid is a glycine amide form of 4-aminobenzoic acid (Item No. 18659). Formulations containing 4-aminohippuric acid have been used as markers to determine renal plasma flow.

### References

- 1. Sekine, T., Watanabe, N., Hosoyamada, M., et al. Expression cloning and characterization of a novel multispecific organic anion transporter. J. Biol. Chem. 272(30), 18526-18529 (1997).
- 2. Uchino, H., Tamai, I., Yamashita, K., et al. p-aminohippuric acid transport at renal apical membrane mediated by human inorganic phosphate transporter NPT1. Biochem. Biophys. Res. Commun. 270(1), 254-259 (2000).
- 3. Leier, I., Hummel-Eisenbeiss, J., Cui, Y., et al. ATP-dependent para-aminohippurate transport by apical multidrug resistance protein MRP2. Kidney Int. 57(4), 1636-1642 (2000).

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

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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