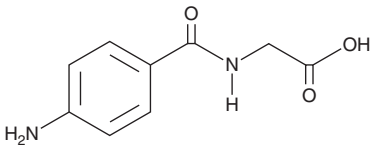
PRODUCT INFORMATION

4-Aminohippuric Acid

Item No. 23726

CAS Registry No.: 61-78-9
Formal Name: N-(4-aminobenzoyl)-glycine
Synonyms: *p*-Aminohippuric Acid, *para*-Aminohippuric Acid, NSC 7550, NSC 13064
MF: $C_9H_{10}N_2O_3$
FW: 194.2
Purity: ≥98%
UV/Vis.: λ_{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 µM 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 µM in HEK293 cells).[1-3] 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM