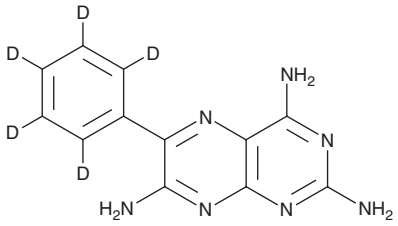
PRODUCT INFORMATION

Triamterene-d_5

Item No. 33815

CAS Registry No.: 1189922-23-3
Formal Name: 6-phenyl-d_5-2,4,7-pteridinetriamine
Synonyms: 2,4,7-Triamino-6-phenylpteridine-d_5
MF: $C_{12}H_6D_5N_7$
FW: 258.3
Chemical Purity: ≥98% (Triamterene)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_5); ≤1% d_0
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Triamterene-d_5 is intended for use as an internal standard for the quantification of triamterene (Item No. 21242) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Triamterene-d_5 is supplied as a solid. A stock solution may be made by dissolving the triamterene-d_5 in the solvent of choice, which should be purged with an inert gas. Triamterene-d_5 is slightly soluble in methanol and DMSO.

Description

Triamterene is an inhibitor of the epithelial sodium channel (ENaC; IC_{50} = 4.5 µM for the rat channel).[1] *In vivo*, triamterene (0.5-32 mg/animal) enhances sodium secretion and decreases potassium secretion in adrenalectomized rats.[2] Formulations containing triamterene have been used in the treatment of edema.

References

1. Kellenberger, S., Gautschi, I., and Schlid, L. Mutations in the epithelial Na^+ channel ENaC outer pore disrupt amiloride block by increasing its dissociation rate. *Mol. Pharmacol.* **64(4)**, 848-856 (2003).
2. Baba, W.I., Tudhope, G.R., and Wilson, G.M. Triamterene, a new diuretic drug. I. Studies in normal men and in adrenalectomized rats. *Br. Med. J.* **2(5307)**, 756-760 (1962).

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