PRODUCT INFORMATION



Triamterene-d₅

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	D
MF:	$C_{12}H_6D_5N_7$	
FW:	258.3	NH ₂
Chemical Purity:	≥98% (Triamterene)	
Deuterium		
Incorporation:	≥99% deuterated forms (d ₁ -d ₅); ≤1% d ₀	
Supplied as:	A solid	
Storage:	-20°C	H_2N^{\prime} N^{\prime} N^{\prime} H_2
Stability:	≥4 years	

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

Laboratory Procedures

Triamterene-d₅ 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-d₅ is supplied as a solid. A stock solution may be made by dissolving the triamterene-d₅ 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; $IC_{50} = 4.5 \mu M$ 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).
- Baba, W.I., Tudhope, G.R., and Wilson, G.M. Triamterene, a new diuretic drug. I. Studies in normal men 2. and in adrenalectomized rats. Br. Med. J. 2(5307), 756-760 (1962).

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.

WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/17/2022

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