

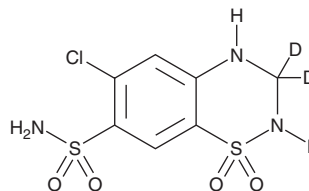
PRODUCT INFORMATION



Hydrochlorothiazide-3,3-d₂

Item No. 39983

CAS Registry No.: 1219798-89-6
Formal Name: 6-chloro-3,4-dihydro-2H-1,2,4-benzothiadiazine-7-sulfonamide-d₂, 1,1-dioxide
Synonyms: HCTZ-d₂, HCTZ-3,3-d₂
MF: C₇H₆ClD₂N₃O₄S₂
FW: 299.8
Chemical Purity: ≥98% (Hydrochlorothiazide)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₂); ≤1% d₀
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

Hydrochlorothiazide-3,3-d₂ is intended for use as an internal standard for the quantification of hydrochlorothiazide (Item No. 21304) 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).

Hydrochlorothiazide-3,3-d₂ is supplied as a solid. A stock solution may be made by dissolving the hydrochlorothiazide-3,3-d₂ in water. We do not recommend storing the aqueous solution for more than one day.

Description

Hydrochlorothiazide is a thiazide diuretic that inhibits the apical membrane sodium chloride cotransporter in the distal and collecting duct nephron segments.¹⁻³

References

1. Odland, B. and Lönnerholm, G. Renal tubular secretion and effects of chlorothiazide, hydrochlorothiazide and clopamide: A study in the avian kidney. *Acta. Pharmacol. Toxicol. (Copenh)* **51(3)**, 187-197 (1982).
2. Majid, D.S.A. and Navar, L.G. Blockade of distal nephron sodium transport attenuates pressure natriuresis in dogs. *Hypertension* **23(6 Pt. 2)**, 1040-1045 (1994).
3. Vongpatanasin, W. Hydrochlorothiazide (HCTZ) is not the most useful nor versatile thiazide diuretic. *Curr. Opin. Cardiol.* **30(4)**, 361-365 (2015).

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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