

Product Data Sheet

Debutyldronedarone-d7 hydrochloride

Cat. No.: HY-12753AS

Molecular Formula: C₂₇H₃₀D₇ClN₂O₅S

Molecular Weight: 544.15

Target: Thyroid Hormone Receptor; Isotope-Labeled Compounds

Pathway: Vitamin D Related/Nuclear Receptor; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Debutyldronedarone- d_7 hydrochloride is deuterated labeled Debutyldronedarone hydrochloride (HY-12753A). Debutyldronedarone (SR35021) hydrochloride, the main metabolite of Dronedarone, is a selective thyroid hormone receptor α_1 (TR α_1) inhibitor. Debutyldronedarone hydrochloride inhibits T3 binding to TR α_1 and TR β_1 by 77% and 25%, respectively. Debutyldronedarone hydrochloride can be used for the research of arrhythmic ^[1] .
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Van Beeren HC, et al. Dronerarone acts as a selective inhibitor of 3,5,3'-triiodothyronine binding to thyroid hormone receptor-alpha1: in vitro and in vivo evidence. Endocrinology. 2003 Feb;144(2):552-8.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

Caution: Product has not been fully validated for medical applications. For research use only.

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