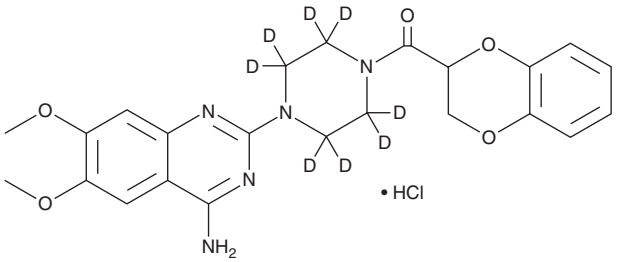
PRODUCT INFORMATION

Doxazosin-d_8 (hydrochloride)

Item No. 30979

CAS Registry No.: 1219803-95-8
Formal Name: [4-(4-amino-6,7-dimethoxy-2-quinazolinyl)-1-piperazinyl-2,2,3,3,5,5,6,6-d_8](2,3-dihydro-1,4-benzodioxin-2-yl)-methanone, monohydrochloride
MF: $C_{23}H_{17}D_8N_5O_5 \bullet HCl$
FW: 496.0
Chemical Purity: ≥98% (Doxazosin)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_8); ≤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

Doxazosin-d_8 (hydrochloride) is intended for use as an internal standard for the quantification of doxazosin (Item No. 18633) 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).

Doxazosin-d_8 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the doxazosin-d_8 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Doxazosin-d_8 (hydrochloride) is soluble in the organic solvent DMSO.

Description

Doxazosin is a non-selective antagonist of α_1-adrenergic receptors (α_1-ARs; K_is = 3.16, 1, and 3.98 nM for α_{1A}-, α_{1B}-, and α_{1D}-ARs, respectively).[1] It inhibits norepinephrine-induced contractions in isolated rat aortic rings and human prostate strips with pA_2 values of 8.8 and 8.2, respectively. Doxazosin inhibits phenylephrine-induced increases in blood pressure and prostatic pressure in anesthetized dogs (pA_2 = 7.5 for both). Formulations containing doxazosin have been used in the treatment of benign prostatic hyperplasia and hypertension.

Reference

1. Kenny, B.A., Miller, A.M., Williamson, I.J.R., *et al.* Evaluation of the pharmacological selectivity profile of α_1 adrenoceptor antagonists at prostatic α_1 adrenoceptors: Binding, functional and *in vivo* studies. *Br. J. Pharmacol.* **118(4)**, 871-878 (1996).

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