

# PRODUCT INFORMATION



## Doxazosin-d<sub>8</sub> (hydrochloride)

Item No. 30979

**CAS Registry No.:** 1219803-95-8  
**Formal Name:** [4-(4-amino-6,7-dimethoxy-2-quinazoliny)-1-piperazinyl-2,2,3,3,5,5,6,6-d<sub>8</sub>](2,3-dihydro-1,4-benzodioxin-2-yl)-methanone, monohydrochloride

**MF:** C<sub>23</sub>H<sub>17</sub>D<sub>8</sub>N<sub>5</sub>O<sub>5</sub> • HCl  
**FW:** 496.0

**Chemical Purity:** ≥98% (Doxazosin)

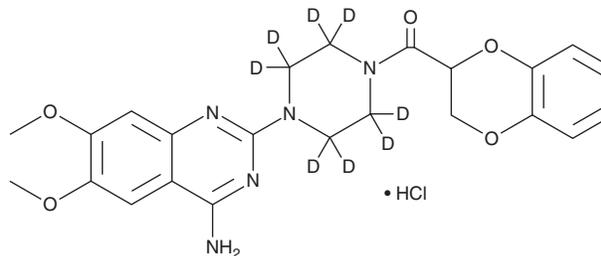
**Deuterium**

**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>8</sub>); ≤1% d<sub>0</sub>

**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<sub>8</sub> (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<sub>8</sub> (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the doxazosin-d<sub>8</sub> (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Doxazosin-d<sub>8</sub> (hydrochloride) is soluble in the organic solvent DMSO.

### Description

Doxazosin is a non-selective antagonist of α<sub>1</sub>-adrenergic receptors (α<sub>1</sub>-ARs; K<sub>i</sub>s = 3.16, 1, and 3.98 nM for α<sub>1A</sub>, α<sub>1B</sub>, and α<sub>1D</sub>-ARs, respectively).<sup>1</sup> It inhibits norepinephrine-induced contractions in isolated rat aortic rings and human prostate strips with pA<sub>2</sub> values of 8.8 and 8.2, respectively. Doxazosin inhibits phenylephrine-induced increases in blood pressure and prostatic pressure in anesthetized dogs (pA<sub>2</sub> = 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<sub>1</sub> adrenoceptor antagonists at prostatic α<sub>1</sub> adrenoceptors: Binding, functional and *in vivo* studies. *Br. J. Pharmacol.* **118**(4), 871-878 (1996).

#### 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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