

# PRODUCT INFORMATION

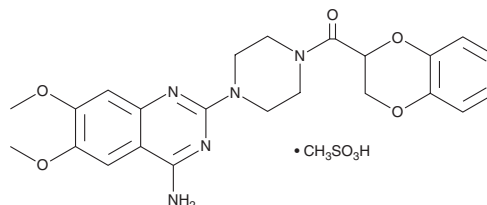


## Doxazosin (mesylate)

Item No. 18633

**CAS Registry No.:** 77883-43-3  
**Formal Name:** [4-(4-amino-6,7-dimethoxy-2-quinazolinyl)-1-piperazinyl] (2,3-dihydro-1,4-benzodioxin-2-yl)-methanone, monomethanesulfonate

**Synonym:** UK 33274-27  
**MF:** C<sub>23</sub>H<sub>25</sub>N<sub>5</sub>O<sub>5</sub> • CH<sub>3</sub>SO<sub>3</sub>H  
**FW:** 547.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 247, 330 nm  
**Supplied as:** A crystalline 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 (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the doxazosin (mesylate) in the solvent of choice. Doxazosin (mesylate) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of doxazosin (mesylate) in these solvents is approximately 2 and 0.5 mg/ml, respectively.

Doxazosin (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, doxazosin (mesylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Doxazosin (mesylate) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### 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 aorta 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. Jardin, A., Bensadoun, H., Delauche-Cavallier, M.C., et al. Alfuzosin for treatment of benign prostatic hypertrophy. *Lancet* 337, 1457-1461 (1991).

#### 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

Buyer 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