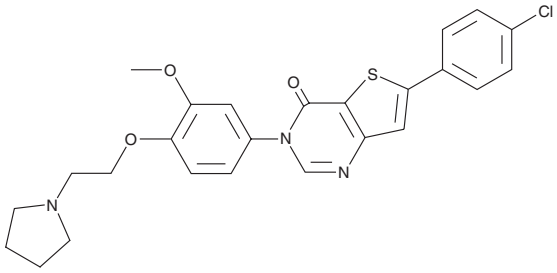
PRODUCT INFORMATION

Alfuzosin (hydrochloride)

Item No. 13648

CAS Registry No.:	81403-68-1
Formal Name:	N-[3-[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]propyl]tetrahydro-2-furancarboxamide, monohydrochloride
Synonyms:	SL 77499-10, Uroxatral
MF:	$C_{19}H_{27}N_5O_4 \bullet HCl$
FW:	425.9
Purity:	≥98%
UV/Vis.:	λ_{max}: 246, 331, 344 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

Alfuzosin (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the alfuzosin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Alfuzosin (hydrochloride) is soluble in organic solvents such as ethanol and DMSO. The solubility of alfuzosin (hydrochloride) in these solvents is approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of alfuzosin (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of alfuzosin (hydrochloride) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Alfuzosin is a post-synaptic α_1-adrenergic receptor antagonist commonly used to improve lower urinary tract symptoms associated with benign prostatic hyperplasia (BPH).[1,2] It displays high-affinity with non-selectivity for the three known human α_1 adrenoceptors (pK_i = 8.0, 8.0, and 8.5 for α_{1A}, α_{1B}, and α_{1D}, respectively).[3] Consistent with a role for α_1 adrenoceptors in mediating contraction of smooth muscle, alfuzosin was first described as having anti-hypertensive effects with peripheral vasodilator properties.[1] In patients with BPH, alfuzosin increases mean urinary flow rate and decreases residual volume.[2] Alfuzosin produces minimal vasodilatory and sexual function side effects.[4-6]

References

1. Sinclair, A.J., Davies, I.B., and Warrington, S.J. *Br. J. Clin. Pharmacol.* **27**, 19-22 (1989).
2. Jardin, A., Bensadoun, H., Delauche-Cavallier, M.C., *et al. Lancet* **337**, 1457-1461 (1991).
3. Kenny, B.A., Miller, A.M., Williamson, I.J.R., *et al. Br. J. Pharmacol.* **118**, 871-878 (1996).
4. Roehrborn, C.G. and Rosen, R.C. *Clin. Interv. Aging* **3(3)**, 511-524 (2008).
5. Nickel, J.C., Sander, S., and Moon, T.D. *Int. J. Clin. Pract.* **62(10)**, 1547-1559 (2008).
6. Michel, M.C. *J. Pharmacol. Sci.* **112**, 151-157 (2010).

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