

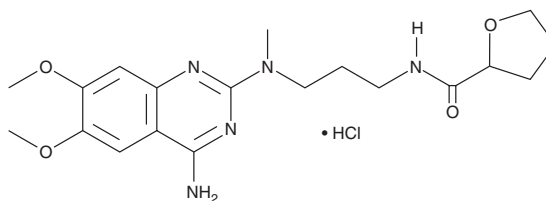
Product Information



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: $C_{19}H_{27}N_5O_4 \cdot HCl$
FW: 425.9
Purity: $\geq 98\%$
Stability: ≥ 2 years at $-20^\circ C$
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that alfuzosin (hydrochloride) be stored as supplied at $-20^\circ C$. It should be stable for at least two years.

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

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 $\alpha_{1A}, \alpha_{1B},$ and $\alpha_{1D},$ 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

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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).

Related Product

ARRB2 Peptide Affinity-purified Polyclonal Antibody - Item No. 13498

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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