Alfuzosin

Cat. No.: HY-B0192

CAS No.: 81403-80-7

Molecular Formula: $C_{19}H_{27}N_5O_4$

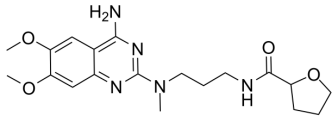
Molecular Weight: 389.45

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (128.39 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5677 mL	12.8386 mL	25.6772 mL
	5 mM	0.5135 mL	2.5677 mL	5.1354 mL
	10 mM	0.2568 mL	1.2839 mL	2.5677 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 3 mg/mL (7.70 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 3 mg/mL (7.70 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 3 mg/mL (7.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Alfuzosin is an α1 adrenergic receptor antagonist used to treat benign prostatic hyperplasia (BPH).Target: α1 adrenergic receptorAlfuzosin, a new quinazoline derivative, acts as a selective and competitive antagonist of alpha 1-adrenoceptor-mediated contraction of prostatic, prostatic capsule, bladder base and proximal urethral smooth muscle, thereby reducing the tone of these structures. Consequently, urethral pressure and resistance, bladder outlet resistance, bladder instability and symptoms associated with benign prostatic hyperplasia are reduced. A limited range of clinical studies have shown oral alfuzosin to be more effective than placebo (in studies of < or = 6 months duration), to have sustained effects on long term

administration (< or = 30 months), and to be comparable with the alpha 1-adrenoceptor antagonist prazosin, in the symptomatic treatment of benign prostatic hyperplasia.Oral alfuzosin 7.5 to 10 mg/day in divided doses appears to be a promising first-line agent for symptomatic treatment of noncomplicated mild to moderate benign prostatic hyperplasia in patients with a high dynamic component to their obstruction. In addition, alfuzosin offers an alternative to prostatectomy (the current 'gold standard') in patients who require surgery but are unfit for this treatment, and in patients requiring symptomatic relief while awaiting surgery.

CUSTOMER VALIDATION

- Protein Cell. 2019 Mar;10(3):178-195.

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REFERENCES

[1]. Wilde MI, et al. Alfuzosin. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic potential in benign prostatic hyperplasia. Drugs. 1993 Mar;45(3):410-29.

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