**PRODUCT INFORMATION**

**Prazosin (hydrochloride)**

**Item No. 15023**

- **CAS Registry No.:** 19237-84-4
- **Formal Name:** [4-(4-amino-6,7-dimethoxy-2-quinazolinyl)-1-piperazinyl]-2-furanyl-methanone, monohydrochloride
- **Synonyms:** CP 12,299-1, NSC 292810
- **MF:** C_{19}H_{21}N_{5}O_{4} • HCl
- **FW:** 419.9
- **Purity:** ≥98%
- **UV/Vis.:** \( \lambda_{\text{max}} \): 214, 247, 330, 342 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

Prazosin (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the prazosin (hydrochloride in the solvent of choice, which should be purged with an inert gas. Prazosin (hydrochloride is soluble in the organic solvent DMSO at a concentration of approximately 0.1 mg/ml.

### Description

Prazosin is an antagonist of \( \alpha_1 \)-adrenergic receptors (\( \alpha_1 \)-ARs).\(^1\,^2\) It selectively binds to \( \alpha_1 \)-ARs with \( K_i \) values of 0.2, 0.25, and 0.32 nM for the human recombinant \( \alpha_{1A} \), \( \alpha_{1B} \), and \( \alpha_{1D} \)-ARs, respectively, over \( \alpha_2 \)-ARs (\( K_i \)'s = 340 and 3.7 nM in \( \alpha_{2A} \)-AR-expressing HT-29 cells and \( \alpha_{2B} \)-AR-expressing NG108 cells, respectively).\(^3\,^4\) It also binds to melatonin receptor 3 (MT3) in hamster brain membranes (IC\( _{50} \) = 7.8 nM).\(^5\) Prazosin inhibits peripheral and central postsynaptic \( \alpha_2 \)-ARs with IC\( _{50} \) values of 0.2 and 1.7 nM in isolated dog aorta and rat brain, respectively.\(^1\) It decreases diastolic blood pressure in normal, renal hypertensive, and spontaneously hypertensive rats when administered at a dose of 1 mg/kg.\(^6\) Prazosin (1.5 mg/kg) increases the number of entries and percentage of time spent in the open arms of the elevated plus maze, indicating anxiolytic-like activity, in alcohol-consuming rats and also reduces alcohol intake and alcohol-seeking behavior in alcohol-prefering rats.\(^7\,^8\)

### References