

## Product Information

## Terazosin hydrochloride

≥98% (TLC), powder

T4680

Store at room temperature.

## Product Description

**Molecular Formula:** C<sub>19</sub>H<sub>25</sub>N<sub>5</sub>O<sub>4</sub>·HCl**Molecular Weight:** 423.9**CAS Number:** 63590-64-7**Melting Point:** 278-279 °C

**Synonyms:** 1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-[(tetrahydro-2-furanyl) carbonyl] piperazine hydrochloride;  
2-[(4-tetrahydro-2-furoyl)-1-piperazinyl]-4-amino-6,7-dimethoxyquinazoline hydrochloride

Terazosin is an α<sub>1</sub>-receptor blocker that is structurally very similar to prazosin, differing in that terazosin contains a tetrahydrofuran unit at the amide linkage whereas prazosin contains a furan unit. The duration of action of terazosin is extended relative to that of prazosin.<sup>1</sup> A review of the pharmacodynamic and pharmacokinetic properties of terazosin has been published.<sup>2</sup> Terazosin (2 μM) has been shown to abolish the norepinephrine response that leads to enhanced c-myc-encoded mRNA levels in cultured cardiac myocytes.<sup>3</sup> Terazosin has been used to probe apoptosis (15 μM) and the rate of DNA synthesis (1-100 μM) in cultured human prostate cancer cells.<sup>4</sup> It has also been utilized to modulate the effects of brain epinephrine in the regulation of motor activity and movement in mice.<sup>5</sup> Assays for the detection of terazosin in plasma by HPLC and by HPLC/ESI-MS have been reported.<sup>6-8</sup>

## Precautions and Disclaimer

For laboratory use only. Not for drug, household or other uses.

## Preparation Instructions

This product is soluble in methanol (20 mg/mL), with heat as needed, yielding a clear, colorless solution.

## References

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3. Starksen, N. F., et al., Cardiac myocyte hypertrophy is associated with c-myc protooncogene expression. *Proc. Natl. Acad. Sci. USA*, 83(21), 8348-8350 (1986).
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6. Cheah, P. Y., et al., Improved high-performance liquid chromatographic analysis of terazosin in human plasma. *J. Chromatogr. B Biomed. Sci. Appl.*, 745(2), 439-443 (2000).
7. Sekhar, E. C., et al., Determination of terazosin in human plasma, using high-performance liquid chromatography with fluorescence detection. *J. Chromatogr. B Biomed. Sci. Appl.*, 710(1-2), 137-142 (1998).
8. Zavitsanos, A. P., and Alebic-Kolbah, T., Enantioselective determination of terazosin in human plasma by normal phase high-performance liquid chromatography-electrospray mass spectrometry. *J. Chromatogr. A.*, 794(1-2), 45-56 (1998).

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