

## (R)-Terazosin

## Chemical Properties

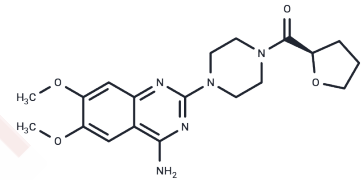
CAS No. : 109351-34-0

Formula: C<sub>19</sub>H<sub>25</sub>N<sub>5</sub>O<sub>4</sub>

Molecular Weight: 387.43

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	(R)-Terazosin is an active R-enantiomer of Terazosin and a potent antagonist of $\alpha$ 1-adrenoceptor [ $\alpha$ 1a, $\alpha$ 1b, and $\alpha$ 1d-adrenoceptor] with $K_i$ values of 6.51 nM, 1.01 nM, and 1.97 nM, respectively).
Targets(IC50)	Adrenergic Receptor
In vitro	(R)-Terazosin exhibits low affinity for $\alpha$ 2a, $\alpha$ 2B, and $\alpha$ 2c-adrenoceptors ( $K_i$ of 3.85 $\mu$ M, 0.33 $\mu$ M, and 0.37 $\mu$ M, respectively). It may serve as a useful probe for exploring the functional roles of adrenoceptor subtypes in various tissues.
In vivo	(R)-Terazosin demonstrates antagonism at rat atrial $\alpha$ 2B receptor (pEC <sub>30</sub> : 5.69) and at rat vas deferens $\alpha$ 1A and $\alpha$ 2A receptors (pA <sub>2</sub> : 7.5 and 5.31, respectively).

## Solubility Information

Solubility	DMSO: 55 mg/mL (141.96 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (12.91 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.5811 mL	12.9056 mL	25.8111 mL
5 mM	0.5162 mL	2.5811 mL	5.1622 mL
10 mM	0.2581 mL	1.2906 mL	2.5811 mL
50 mM	0.0516 mL	0.2581 mL	0.5162 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Hancock AA, et al. Actions of terazosin and its enantiomers at subtypes of alpha 1- and alpha 2-adrenoceptors in vitro. *J Recept Signal Transduct Res.* 1995 Sep-Dec;15(7-8):863-85.

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