(S)-Terazosin

Cat. No.: HY-B0371D

CAS No.: 109351-33-9

Molecular Formula: $C_{19}H_{25}N_5O_4$

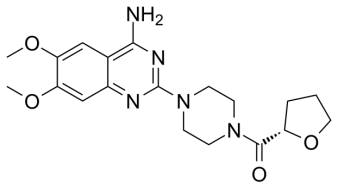
Molecular Weight: 387.43

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 150 mg/mL (387.17 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	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

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

BIOLOGICAL ACTIVITY

Description

(S)-Terazosin is an active S-enantiomer of Terazosin. (S)-Terazosin is a potent and high-affinity α-adrenoceptor antagonist with K_i values of 3.91 nM, 0.79 nM and 1.16 nM for α1a, α1b and α1d-adrenoceptor, respectively. (S)-Terazosin also has high-affinity for α2a, α2B and α2c-adrenoceptor with K_i values of 729 nM, 3.5 nM and 46.4 nM, respectively[1].

IC_{50} & Target

Ki: 3.91 nM (α1a-adrenoceptor), 0.79 nM (α1b-adrenoceptor) and 1.16 nM (α1d-adrenoceptor); 729 nM (α2a-adrenoceptor), 3.5 nM (α2Ba-adrenoceptor) and 46.4 nM (α2c-adrenoceptor)[1]

In Vitro

The racemic compound and its enantiomers show high and apparently equal affinity for subtypes of α1-adrenoceptors with K_i values in the low nanomolar range, and showed potent antagonism of α1-adrenoceptors in isolated tissues, with the enantiomers approximately equipotent to the racemate at each α1-adrenoceptor subtype. At α2b sites, (R)-Terazosin binds less potently than either the (S)-Terazosin or racemate[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

(S)-Terazosin shows antagonism of at rat atrial α2B receptor with a pEC30 of 6.93. (s)-Terazosin shows antagonism of at rat vas deferens α1A and α2A receptor with pA2 values of 8.3 and 6.12, respectively[1].

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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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