Spirapril hydrochloride

Cat. No.: HY-A0230A

CAS No.: 94841-17-5

Molecular Formula: $C_{22}H_{31}ClN_2O_5S_2$

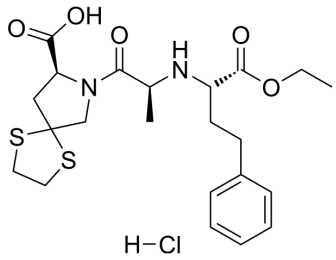
Molecular Weight: 503.07

Target: Angiotensin-converting Enzyme (ACE)

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (198.78 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9878 mL	9.9390 mL	19.8779 mL
	5 mM	0.3976 mL	1.9878 mL	3.9756 mL
	10 mM	0.1988 mL	0.9939 mL	1.9878 mL

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

BIOLOGICAL ACTIVITY

Description

Spirapril (SCH 33844) hydrochloride is a potent angiotensin converting enzyme (ACE) inhibitor with antihypertensive activity. Spirapril competitively binds to ACE and prevents the conversion of angiotensin I to angiotensin II. Spirapril is an orally active proagent of Spiraprilat and can be used for the research of hypertension, congestive heart failure[1].

IC_{50} & Target

IC50: angiotensin converting enzyme[1]

In Vivo

Spirapril (feeding needle; 10 mg/kg; 3 weeks) decreases alcohol intake in TGM123 mice and dose not reduce the alcohol consumption in TLM mice. Spirapril shows a 40.2% reduction in ACE activity in brain membrane from treated-mice. It crosses the blood-brain barrier and suppresses the transgene effect in the experiments.[2]

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

Animal Model:	TGM123 mice (expressing a rat angiotensinogen transgene) and TLM (lacking the angiotensinogen gene) mice[2]
Dosage:	10 mg/kg

Administration:	Feeding needle; 10 mg/kg; 3 weeks
Result:	Alter voluntary alcohol consumption in animals. Crossed the blood-brain barrier and may influences alcohol consumption mainly by decreasing central angiotensin II (AII) levels.

REFERENCES

[1]. Spirapril. Drugbank.

[2]. B Maul, et al. Alcohol consumption is controlled by angiotensin II. FASEB J

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